Review of Field Delivery of Animal Health Services in Scotland



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EXECUTIVE SUMMARY

Scottish Ministers asked Professor Charles Milne to undertake an independent review to assess the animal health and welfare operational services delivered by Animal and Plant Health Agency(APHA) in Scotland and to consider whether it would be beneficial to retain some or all of the existing services or to create a Scottish Veterinary Service (SVS). The terms of reference of the review also required proposals for potential models for an SVS and to identify further work that would be required to support decision making.

The review methodology was based on desk-based analysis and face to face interviews. This was supplemented by written evidence provided by several organisations.

It is important to acknowledge that the GB approach to operational delivery of animal health and welfare services has been effective in meeting Scotland's needs for several decades. The transfer of animal health and welfare policy and legislative competence to the Scottish Parliament in 2000 as part of the devolution settlement is regarded as having been beneficial for the Scottish livestock industries but has inevitably led to divergence of policy which is likely to increase in a post Brexit era. APHA, as a Defra agency, is understandably focussed on Defra priorities currently the Godfray review, on bovine tuberculosis in England, and the Stacey review on farm inspection and regulation in England. This had resulted in concern that there is a lack of focus on Scottish priorities, a perception that was reinforced by a widespread unawareness within APHA of the Scottish Government's (SG) Animal health and welfare in the livestock industry: strategy 2016 – 2021.

A strength of APHA has been the centralisation of several functions including traceability and the issuing of export health certification. This has enabled the development of expertise and a consistency of service which has been well received by customers. In other areas the rigid application of processes has had a detrimental impact on Scotland. OV contracts, which are appropriate for practices in England which undertake considerable volumes of work associated with bovine tuberculosis, do not work well in Scotland where the reduced testing requirement consequential to Scotland's officially free status result in an uneconomic imbalance between income and the costs of training and validation. This has led to many practices disengaging from the agency with potentially detrimental impacts on surveillance and willingness to participate in disease response activities. SG has also experienced difficulty and cost in changing focus or priorities of field work which does not fit well with the agility demonstrated in policy development where, due to its small size, Scotland is able to work with stakeholders to deliver rapid change which enables it to deliver an ambitious animal health and welfare program.

Scottish livestock industries are reliant on both domestic and international market access. Considerable work has been undertaken within Scotland over many years to develop premium brands within terrestrial livestock and aquaculture production. These products are underpinned by animal health and welfare standards that are set above legal requirements and are validated by robust assurance schemes. SG has supported this approach through its animal health and welfare policies and in working in partnership with industry to improve the overall health status of Scottish

livestock as exemplified by the current Bovine Viral Diarrhoea (BVD) eradication scheme. Industry stakeholders envisage that a Scottish Veterinary Service could be designed to better support this approach in the future.

In evaluating alternative models for delivery in Scotland consideration was given to the potential impact on our partner administrations within the UK. Any detrimental impact on international trade, disease response activity and access to evidence and expertise that is currently available and shared through the current arrangements would need to be managed.

Other considerations in the assessment of the proposed delivery models included the overall fit with animal health and welfare and wider relevant SG policies, agility and flexibility, delivery of shared responsibilities including surveillance, traceability, export health certification, consistency and management of cross border issues and potential cost.

Potential delivery opportunities of an SVS options were assessed. These included strengthening the reputation of Scotland's livestock industries through an innovative approach to policy development and delivery, increased collaboration and joined up working in Scotland, more efficient and consistent inspection and enforcement with reduced footfall on farms and the potential to develop a coherent and compelling narrative to support trade relating to Scotland's animal health and welfare systems.

Three options were considered:

- Retain current arrangements with APHA working with the agency to deliver improvements to address some of the shortcomings identified by this review;
- Create a Scottish Veterinary Service (SVS) which would undertake the functions currently delivered by APHA on behalf of Scottish Ministers; and
- Create a new SVS which would provide a bespoke model of delivery of animal health and welfare services in Scotland which would include the functions currently delivered by APHA on behalf of Scottish Ministers but could include wider responsibilities to drive synergy and effective delivery of operations services within the Scottish context.

Evaluation of the evidence available demonstrated that the development of a new bespoke SVS for the delivery of animal health and welfare services in Scotland would best address the deficiencies identified with the current arrangements and provide significant opportunities to benefit Scotland's livestock industries in the future.

To support this decision and to facilitate any changes agreed consequent to this review further work, identified in section 5 of this report, will be required.

The creation of a Scottish Veterinary Service presents an exciting opportunity to improve and modernise animal health and welfare operational delivery in Scotland. As part of the review process into current and potential arrangements in Scotland the following recommendations have been developed:

Recommendation 1 – the creation of a stand-alone Scottish animal health and welfare delivery body would best meet Scotland's long-term interests.

Recommendation 2 –the transition to a separate Scottish Veterinary Service provides an opportunity to deliver efficiencies and enhanced service excellence through the formation of a bespoke delivery body with a wider range of functions than that currently delivered by APHA in Scotland. Additional areas for consideration could include, but not be limited to; meat hygiene inspection, animal feed controls, scanning surveillance, aquatic disease control, bee health as well as a greater clarity and responsibility for farmed animal health and welfare enforcement.

Recommendation 3 - a Scottish Veterinary Service should report directly to the CVO Scotland.

Recommendation 4 – the CVO Scotland will require adequate support structures to manage these additional responsibilities including business and project management expertise.

Recommendation 5 – the transition to, and future maintenance of, the Scottish Veterinary Service will require adequate resourcing to ensure that the requirements of Scotland's important livestock and food and drink sectors are safeguarded.

Recommendation 6 – the remaining budgets held by Defra on a GB basis should be devolved to increase transparency, ensure alignment with policy, and allow effective management to ensure value for money.

Recommendation 7 – Scotland should continue to utilise the Pirbright and Weybridge UK refence laboratories for the diagnosis of exotic notifiable diseases. Suitable arrangements will need to be implemented to ensure that change does not have a negative impact on the ability of these laboratories to deliver these essential functions.

Recommendation 8 – further work will be required to ensure a successful transition to a new body with minimal risk to both Scotland and other UK administrations. This will include consideration of how functions including, traceability, Export Health Certification, the Operations Manual (some of which are currently centralised), will be delivered.

Recommendation 9 – documented agreements will need to be developed to ensure joined up delivery of surveillance, disease incursion response, trade agreements and the support for audits by trading partners.

Recommendation 10 – as part of the work to develop a future Scottish Veterinary Service consideration should be given to existing models in Northern Ireland and internationally. Models that address similar challenges, industry and trading patterns including the Scandinavian countries and New Zealand could provide valuable insights to inform this exercise.

INTRODUCTION TO THE REVIEW

1 Introduction

- 1.1 The State Veterinary Service, which historically delivered animal health and welfare services in Great Britain was restructured as an Executive Agency of Defra on 1 April 2005 and has transitioned over time to its current model as the Animal and Plant Health Agency (APHA). Most of the policy relating to animal health and welfare was fully devolved to Scottish Ministers as part of the devolution settlement in 2000. In 2011 parts of the animal health and welfare delivery budgets were devolved to Scottish Government. The "Concordat on animal health and welfare matters between (1) the Secretary of State for Environment, Food and Rural Affairs (2) the Scottish Ministers and (3) the Welsh Ministers" provided an undertaking that Scottish Government would continue funding APHA for at least the duration of the Spending Review period starting in April 2011 and ending in March 2015.
- 1.2 Scottish Ministers pledged to work with livestock keepers to get best value from the devolved budgets and to continue building on the good progress made across a number of animal health issues in Scotland in recent years.
- 1.3 Scottish Ministers committed to carrying out a review to consider the way forward noting that this review would need to carefully consider the diverse nature of APHA, and the benefits Scotland receives from being part of a GB organisation

2 Terms of reference

2.1 The terms of reference were developed by Scottish Government to direct the work undertaken during the review of the delivery of animal health and welfare work delivered for Scottish Ministers by the APHA. The full terms of reference can be found in Annex 1. The aim and objectives of this work are:

Aim

- a. The review will consider whether it would be most beneficial for Scottish Ministers to either retain some or all the existing services delivered by the APHA, or create a Scottish Veterinary Service by:
 - Identifying advantages and disadvantages of each option;
 - Outlining one or more alternative delivery models; and
 - Identifying critical areas where further work may be required to allow Ministers to make an informed decision
- b. The reviewer may also identify activities and operations by APHA (other than the Scottish APHA Field Service), or other organisations in the field of animal health and veterinary controls, that may also be considered for delivery by a potential Scottish Veterinary Service.

Objectives

- c. The research objectives for this project are to:
 - Assess the current cost and infrastructure of the field delivery of animal health and welfare services delivered by the Animal and Plant Health Agency (APHA) in Scotland.
 - Review whether the existing staff numbers are adequate in order to deliver an efficient and resilient service.
 - Provide recommendations for the future delivery of animal health and welfare field services delivered by the Animal and Plant Health Agency (APHA) in Scotland.
- 2.2 The terms of reference also required the production of a final report, containing an executive summary and providing recommendations SG regarding the delivery of field services in line with the aim and objectives of the project.

3 Methodology

- 3.1 Whilst commissioned by the SG the review was carried out independently from both SG and APHA. SG provided secretariat support to arrange meetings, visits and teleconferences and, where required, provision of documentation relevant to the work.
- 3.2 The review was undertaken in a short time period and consequently, was limited to a review of documentation relating to current arrangements and interviews with a wide range of partners and stakeholders with roles or interest in the delivery of animal health and welfare services in Scotland. These included industry, delivery, enforcement, surveillance and research organisations. Recognising the impact of any potential change the reviewer engaged with interested organisations across Scotland as well as consulting APHA and the UK CVOs.
- 3.3 Interviewees were asked a set of core questions which were augmented by questions specific to their areas of interest. All participants were invited to provide any further evidence that they thought was relevant. Any further information or clarification required was sought through the secretariat.

4 Acknowledgements

4.1 I am grateful to officials in the Scottish Government and APHA for their contributions to the review which were open and comprehensive. This allowed an assessment of current delivery, the identification of the many strengths of the existing arrangements as well as issues of concern. I would also like to take this opportunity to thank the various organisations and individuals who contributed their time and thoughts to the review. Finally, I would like to thank the secretariat for the high-quality support and resilience provided throughout the review process.

Section 1 – Current arrangements for the delivery of Animal Health and Welfare policy and operational delivery in Scotland

- 5 The evolution of animal health and welfare policy and delivery in GB and Scotland
- 5.1 The origins of state veterinary medicine in GB can be traced back to the formation of the Veterinary Department of the Privy Council in 1865. This occurred in response to incursions of cattle plague (Rinderpest) in the previous few years which had caused high mortality in cattle across the country with associated economic losses. The Veterinary Department was responsible for national animal health concerns principally the control of exotic epidemic disease. The Veterinary Department became the Diseases of Animals Branch of the new Ministry of Agriculture and Fisheries in 1920.
- 5.2 Enforcement of animal health legislation was, and generally remains, the responsibility of Local Authorities, however, in 1938 the veterinary services of Local Authorities were transferred to the Ministry with the aim that 'the attack on animal diseases should be conducted on a national scale by a centrally organised staff'. There was some argument at the time for a separate Scottish veterinary service which, although unsuccessful, did result in the requirement that the Secretary of State for Scotland should be consulted on all matters affecting the control of animal disease in Scotland.
- 5.3 Following the Report of the Royal Commission on Scottish Affairs in 1954, which advised that the Secretary of State for Scotland should assume the responsibilities for animal health in Scotland, with the exception of epidemic diseases, these functions were transferred in 1955 through the Transfer of Functions (Animal Health) Order 1955. Devolution in 2000 transferred all policy and legislative responsibilities for animal health and welfare with a small number of exemptions, including international trade and veterinary medicines, to the Scottish Parliament. This is widely regarded as having been beneficial for the Scottish livestock industries.
- 5.4 On 1 April 2005 the State Veterinary Service became an Executive Agency of Defra delivering animal health and welfare services across GB. In 2011 the Animal Health Agency, as it had become, became part of the Animal Health and Veterinary Laboratories Agency (AHVLA) which in turn transitioned to the Animal and Plant Agency in 2014. APHA is the current organisation providing animal health and welfare services across GB.
- 6 Animal Health and welfare policy in Scotland
- 6.1 The purpose of Scottish Government is to 'focus on creating a more successful country with opportunities for all of Scotland to flourish through increased wellbeing, and sustainable and inclusive economic growth'. Livestock farming contributes to the delivery of this purpose through the development of thriving businesses, including in the more remote parts of Scotland, which are sustainable and globally competitive, and which contribute to the health of the nation as well as protecting Scotland's iconic environment. 85% of Scotland is designated as Less

Favoured Area. Due to the poor quality of land in these areas farming options are limited and extensive livestock farming is an important element of the local economy providing employment and a range of public benefits.

- 6.2 The Scottish Government's Animal Health and Welfare Strategy 2016 2021 outlines how it intends to build on the strengths of the Scottish industry to deliver national outcomes. It recognises the importance of the livestock industry to Scotland both as an employer, supporting 35,000 jobs, and in terms of its £1.6 billion contribution to the economy. There is also recognition of the contribution that this industry makes to Scotland's aspirations to be a 'Good Food Nation' and its stewardship responsibilities in the maintenance of Scotland's world-famous landscapes.
- 6.3 The strategy is built on the foundations of strong partnership working, a skilled and flexible workforce and is underpinned by a vibrant long-established land-based science sector.
- 6.4 Scotland has a reputation for high standards of animal health and welfare. It has a long history of implementing and administering robust assurance schemes with rigorous audit and enforcement to underpin standards. In recognition of the challenges facing Scottish producers and the importance of accessing premium markets there has been a longstanding focus on quality as exemplified by the recognition through the Protected Geographical Indicator (PGI) status of Scotch Beef and Lamb as well as the Specially Selected Pork brand. However, in an increasingly competitive global market there is recognition that we need to use what has been achieved to date as a springboard for continued improvement.
- 6.5 Scotland has unique challenges including its geography, climate, industry and animal health and welfare status. Implementing the strategy will need to take account of these challenges as well as requiring collaborative working between the livestock and associated industries, government and a range of delivery partners and interests in order to deliver the desired outcomes.
- 6.6 The strategy acknowledges that livestock farming has an important role to play in managing its contributions to the emissions impacting on climate change through improving the biological efficiency of production. This can be achieved in part through improvements in animal health including better management and control of endemic disease. Scotland has already achieved progress in controlling several significant endemic diseases. It currently enjoys official freedom from bovine tuberculosis and is working with the livestock industry to control, and possibly eradicate, Bovine Viral Diarrhoea and to control Sheep Scab. SG aims to work with industry to build on these successes to continue to reduce the impact of endemic disease.
- 6.7 The Strategy outlines SG's priority for the delivery of its animal health and welfare services which is to retain a system that can not only deliver the required services in normal conditions but is also able to respond quickly and effectively to an incursion of epidemic animal disease.

- 7 Current arrangements for the delivery of animal health and welfare government operational services in Scotland
- 7.1 There is a complex delivery landscape for terrestrial and aquatic animal health and welfare services in Scotland. The livestock industry has a fundamental role in managing the health and welfare of the animals that they produce. In addition, government is responsible for policy, legislation and enforcement of animal health and welfare. Government's responsibilities fall mainly into four areas:
 - the control of epidemic animal diseases e.g. Foot and Mouth disease;
 - veterinary public health including the control of zoonotic disease, meat hygiene, feed safety, residues and antimicrobial resistance;
 - facilitation of domestic and export trade; and
 - animal welfare.
- 7.2 Whilst APHA deliver a significant proportion of this work several other organisations including Local Authorities, Police Scotland, Food Standards Scotland (FSS), Marine Scotland, SG Rural Payments and Inspections Division, Scottish SPCA and Health and Safety Executive (HSE) have regulatory roles and provide varying levels of input to Scottish animal health and welfare services.
- 7.3 APHA is an executive agency of Defra which also delivers services in the devolved administrations funded by Scottish and Welsh Ministers. The agency has a wide range of functions including the delivery of animal, bee and plant health services, animal welfare, surveillance and diagnostics through the veterinary investigation centres (VICs) in England and Wales, the Lasswade and Weybridge laboratories and a significant research program. However, in Scotland APHA's functions are limited to animal health and welfare operations although these are supported by the diagnostics and research provided by Lasswade and Weybridge. The VIC services in Scotland are provided by the SRUC laboratories assisted by the Moredun Research Institute.
- 7.4 APHA has a wide and diverse range of responsibilities in Scotland, exemplified by the considerable body of legislation under which it has powers and for which it has enforcement responsibilities. The functions delivered are described in the APHA Annual Report 2018/19 and include:
 - Maintaining and developing the operational infrastructure for dealing with notifiable disease.
 - Surveillance and response to keep Scotland free of bovine TB.
 - Helping to open export markets and supporting ongoing exports of Scottish animals, fish and products.
 - Support for the Scottish livestock industry's initiatives to tackle endemic disease.
 - Monitoring and controlling animal disease threats to public health.
 - Access to APHA's bee inspection database (BeeBase).
- 7.5 Leadership and management within APHA was raised consistently during the review process. Visibility of senior leaders was perceived to be low. Matrix

management has resulted in lack of clarity in the chain of command and the locating of administrative teams on several sites has resulted in reduced contact and oversight by managers. Integration between disciplines was poor with administrative staff being discouraged from communicating with the technical and veterinary staff. The support provided by Veterinary Leaders is, however, valued and highly regarded by staff.

- 7.6 The reliance on employing managers from non-animal health and welfare backgrounds is perceived as reducing understanding of the business and this is exacerbated by the rapid turnover of staff in these roles. Effective succession planning would assist in addressing this concern.
- 7.7 Management within APHA was described as rigid and prescriptive resulting in staff feeling disempowered. Work was characterised as being driven by the need to deliver key performance indicators rather than being outcome focussed.
- 8 Current cost of operational delivery by APHA
- 8.1 In 2019/20 the cost to Scottish Government for the delivery of APHA operations in Scotland is £12.7 million. This includes £5.9m for field delivery, £5.626m for central and core functions and £1.153m for surveillance.
- 8.2 Field costs include the pay and non-pay costs of Scottish field staff, travel and subsistence, consumables and OV costs. The activities covered include animal by products, animal identification, exotic disease control, reportable diseases and zoonoses, tuberculosis, TSE and animal welfare.
- 8.3 Central costs relate to the administrative and office-based support provided through the centralised service centres. These costs are provided on a GB basis and are apportioned through an agreed formula, using livestock numbers in each administration as the denominator, as documented in the Concordat. Scotland's share of these costs is 15.9%.
- 8.4 Core costs include corporate office costs, Information Technology (IT), Health and safety (H&S), business change and contracts. Only the animal health and welfare core costs are charged to Scotland again on the pre-agreed share basis of 15.9% and in 2018/19 amounted to £1.1m. This element also includes Defra notional costs which cover estates, IT, HR communications, finance, legal and commercial which in 2018/19 amounted to £3.4m. SG has benefited in the work undertaken by APHA to streamline and drive efficiencies in these costs which has had the effect of reducing the SG contribution.
- 8.5 Frustration has been experienced at the lack of financial management within APHA particularly in the forecasting of underspends which limits the ability of SG to plan alternative work before the end of the financial year.
- 8.6 Some budgets have been retained on a GB basis, mainly in the science and laboratory services area. These budgets funds work in several areas including:

Enhanced Surveillance for emerging disease; Exotic Diseases; Animal Welfare; TSE Surveillance; and Parts of the tuberculosis program.

8.7 It has not been possible to obtain the proportion of these budgets that have been nominally allocated to Scotland which prevents an assessment of value for money.

9 Staff resources

- 9.1 Annex 3 contains an organogram of the current APHA structure in Scotland. The current numbers of APHA field posts in Scotland are 37 veterinary staff and 25 Animal Health Officers. This is a significant reduction in numbers from 2005, when the State Veterinary Service became an agency, when there were some 50 veterinary staff and 29 AHOs employed in Scotland.
- 9.2 Administrative staff numbers have also reduced from 68 in 2005 to 53 employed in 2019. Due to the centralisation of several functions that involve predominantly administrative input it is less transparent how this change has impacted on the effectiveness of delivery.
- 9.3 However, the reduced complement of staff allied to the loss of expertise and experience undermines confidence that Scotland would be able to mount an effective response to a significant disease event.

Section 2 – Future challenges

There are several challenges and pressures that will need to be addressed to enable effective delivery of animal health and welfare services in the future.

10 Policy

10,1 Following devolution in 2000 there has been a gradual divergence of animal health and welfare policy in Scotland which is likely to continue and possibly accelerate post Brexit. SG has a track record of working closely with industry as exemplified by the current BVD eradication program and, in the absence of bovine tuberculosis, is likely to continue to focus on the control of endemic diseases impacting on the livestock industries within Scotland. Animal health and welfare operations are likely to have an increasingly significant role in contributing to wider SG policies such as climate change where challenging targets have been agreed in Scotland. The control of endemic diseases, to improve the efficiency of production, and the prevention/control of exotic disease incursions can make an important contribution to the climate change agenda.

11 Brexit and international trade

- 11.1 The success of Scotland as an exporting country is determined by the quality of its products and the confidence that other countries have in Scotland's animal health and, increasingly, animal welfare standards and their enforcement. As we move to a post Brexit era it is likely that there will be an increase in trade to non-EU countries. Scotland will need to ensure that it is engaged at a UK level to ensure that its interests are represented in future trade arrangements. The ability to trade with the EU and this wider market will be enhanced by a high health and welfare status supported by excellent surveillance systems and robust assurance, regulatory and enforcement structures. Future animal health and welfare operational delivery arrangements will have an important role in maintaining confidence in Scottish livestock and food production.
- 11.2 Post Brexit there may be implications for animals moving to and from Northern Ireland depending on the final deal negotiated with the EU. This could involve further checks at the Scottish ports involved in this trade.
- 11.3 Another possible impact could be the effect of Brexit on the size and structure of the Scottish livestock industries. This in turn could have implications for the level of animal health and welfare operational services required.
- 11.4 The creation of an SVS could add complexity to the narrative that the UK develops to provide assurance to trading partners that it is compliant with WTO rules, meets OIE standards and is addressing individual country requirements. This is not unprecedented in that Northern Ireland currently has its own animal health and welfare organisation but would need active management to mitigate risk.
- 11.5 Access to EU national veterinarians may be restricted post Brexit. APHA, and FSS, currently rely heavily on recruiting foreign graduates to fill posts within Scotland.

12 Industry

- 12.1 Farming, including the livestock industries, makes an important contribution to GDP in Scotland. Between 2012 and 2018 this contribution was between 20 and 40% greater in Scotland than the UK average. In some of the more remote areas of Scotland agricultural output is far more significant to the local economies and is a major contributor to sustaining these fragile communities.
- 12.2 Scotland also faces significant climatic and geographical challenges for example 85% of Scotland is classified as Less Favoured Area which is unsuitable for arable production but where livestock farming is a viable option. That and its relative isolation have resulted in Scottish industry pursuing premium markets for animal products as the additional costs of production and transportation make commodity markets unviable.
- 12.3 To support access to premium markets Scotland has a long history of implementing robust assurance schemes which deliver standards above the legal minimum requirements. It has also developed strong branding for Scottish products including acquiring PGI status for Scotch Beef and Lamb. This approach is underpinned through the provision of consistent, accurate livestock health advice through commercial and publicly supported channels including 'Monitor' farms. Possible changes to trading patterns and opportunities post Brexit are likely to increase the importance of this work. Animal health and welfare services in Scotland are likely to play an important role in collaborating with other organisations in Scotland to deliver increasingly challenging health and welfare standards to support market access.

13 Recruitment and retention of staff

- 13.1 Over the last few years recruitment and retention has become an increasing challenge for APHA in Scotland resulting in a significant turnover of veterinary, technical and administrative staff which has undoubtedly had a negative impact on capability. State veterinary medicine is a specialised field in which expertise takes years to develop. Similarly, Animal Health Officers undertake a wide range of duties which require significant training and development. The constant churn of staff is wasteful in terms of the continual training resource required and reduces capability across the organisation. It has also resulted in the recruitment of staff with limited, if any, practical, clinical and diagnostic experience. This presents a real risk to operational effectiveness particularly in any response to a disease incursion. This concern is exacerbated in that there are few experienced staff remaining within the organisation with the capability and experience to train new entrants and these staff are approaching retirement age. Consequently, the window of opportunity to capture this experience is short.
- 13.2 It should be recognised that recruitment of staff in remote areas is a challenge both for private practitioners and other government departments including the FSS. There is a multiplicity factors that contribute to the challenges of recruitment and retention. Recent surveys by the British Veterinary Association (BVA) indicate that job satisfaction and worthwhile work are key drivers. Feedback from APHA operations staff is positive in this respect with staff recognising the importance of and

being genuinely passionate about the work they undertake. However, the work is often challenging both emotionally and physically. Staff can feel isolated and support mechanisms are required for staff involved in stressful tasks such as mass culling and serious animal welfare cases.

- 13.3 Pay and lack of pay progression and career opportunities have been repeatedly cited as significant contributory factors. Veterinary Inspectors are now recruited at a lower Senior Executive Officer (SEO) grade and therefore salary than the previous Veterinary Officer grade (equivalent to Grade 7). This is unattractive for veterinarians most of whom have significant student loans to repay. The lack of progression and the perceived unfairness of the disparity of pay with VOs has had a negative impact on many VI's. AHOs also face challenges in servicing student loans from the salaries that they receive.
- 13.4 The lack of training and development has also been raised as a concern by staff which can lead to frustration and decreased morale. In some examples this deficiency has contributed to a decision to leave the organisation.
- 13.5 Over the past decade there has been an increasing reliance on recruitment of non-UK veterinary graduates most of whom come from EU countries. Whilst these staff have the appropriate veterinary training, they often have little knowledge of Scottish livestock farming systems which can negatively affect stakeholder perception.
- 13.6 A recent report assessed the significant economic value of the veterinary profession in Scotland whilst also highlighting the challenges outlined above. A change to the structure of field delivery services in Scotland could help to strengthen the sustainability of the profession in Scotland.
- 13.7 Addressing the issue of recruitment and retention will be a priority both for APHA and, if created, an SVS as without stability it is not possible to develop the capability required to effectively manage the multiplicity of tasks within animal health and welfare operations.

14 New technologies

- 14.1 Recent years have seen rapid advances in diagnostic capabilities with molecular diagnostics producing rapid results and whole genome sequencing providing greater insights into the epidemiology of animal and zoonotic disease. Pen side testing has also advanced and is a tool utilised by other countries allowing rapid provisional diagnosis which can speed up response times. The use of pen side testing must always be followed up with the appropriate reference laboratory testing as this provides the definitive result. Such technologies are expensive to develop and have potential trade implications and consequently, there is advantage in retaining a co-ordinated approach to both investment and prioritisation in this field.
- 14.2 IT and mobile phone technology advances enable remote consideration of suspect exotic disease cases. Whilst this does not replace the need for proper laboratory follow up it does allow, possibly in conjunction with pen side testing, support to be provided to the investigating officer and risk assessment of the

likelihood of a response being required. The hours gained through this approach could have a significant impact on the effectiveness of the ensuing response.

- 14.3 IT capability also has the potential to allow for remote working which may assist staff unable to relocate to progress their career within the animal health and welfare delivery sphere.
- 14.4 The use of syndromic surveillance has also produced opportunities for improved understanding of endemic disease distribution and prevalence, early identification of incursions of exotic disease, the identification of new diseases and can also provide useful data to support country freedom claims for trade. The challenge for the future is how best to harness this capability to provide useful data and to manage the risks of unsubstantiated reports of diseases that can impact on trade.
- 14.5 Social media has become an increasingly important communication tool particularly in emergency responses including those involving animal disease. When used well it can have positive impacts on how the public perceives the quality of the response. The government in Queensland has been very effective at using this media and has received widespread recognition for the quality of its communication during emergencies. To maximise the effective use of social media considerable investment, preparation and continuity of use are required. Due to the not inconsiderable costs of providing a social media facility consideration of coordination with the wider Scottish Government emergency response capability should be considered.
- 14.6 The harnessing of new technologies is often challenging and expensive but also provides solutions to some very real problems which impact on the efficient delivery of operations services. Keeping abreast of developments and implementing appropriate technologies will be an ongoing challenge for the service over the coming years.

Section 3 – Options for the delivery of government animal health and welfare services in Scotland

- 15 Future options
- 15.1 An important principle in considering future options is that any change must not undermine the status and reputation of the Scottish livestock industries and the production chains that they support, or Scotland's ability to fulfil its international obligations. A future model must also be able to meet the commitments of SG as articulated in the Animal Health and Welfare Strategy 2016 2021 as well as wider policy targets.
- 15.2 It is pertinent to record the widespread recognition that the GB delivery model has a proven track record of delivering animal health and welfare services in Scotland (and GB) over many decades. This model has effectively supported trade including the development and maintenance of robust surveillance and traceability systems. In addition, it has managed significant disease challenges including Foot and Mouth disease in 2001 and the BSE crisis albeit these occurred whilst the organisation was embedded in core government. Any changes must not have a negative impact on trade and the ability to manage incursions of exotic epidemic animal diseases. It is also recognised that there are advantages in a GB organisation in managing transborder disease outbreaks whilst acknowledging that there may be policy differences between administrations in how the disease, and the wider impacts of an outbreak, are managed.
- 15.3 Three potential options for the delivery of animal health and welfare services in Scotland have been identified:
- 1 Retain current arrangements with APHA working with the agency to deliver improvements to address some of the shortcomings identified by this review;
- 2 Create a Scottish Veterinary Service (SVS) which would undertake the functions currently delivered by APHA on behalf of Scottish Ministers; and
- 3 Create a new SVS which would provide a bespoke model of delivery of animal health and welfare services in Scotland which would include the functions currently delivered by APHA on behalf of Scottish Ministers but could include wider responsibilities to drive synergy and effective delivery of operations services within the Scottish context.
- 15.4 The organisation created to address options 2 or 3 should not be a return to an historical model but should build on the many advances made by the various agencies since 2005. In both options it is envisaged that the resulting organisation should report to the CVO Scotland who will need to be provided with the support structure required to manage this significantly expanded role. Consideration of the appropriate structure for an SVS, whether option 2 or 3, will be required once the scope of responsibilities has been determined. Embedding the organisation within central government, a similar approach to that taken in Northern Ireland, or creating a new Executive Agency are possible models the merits of which need to be thoroughly considered.

Section 4 - Analysis of options

Several issues have been identified and have been considered in determining the feasibility of the options identified.

- 16 Delivery of Scottish policies and priorities
- 16.1 It is important that the organisation delivering animal health and welfare policy in Scotland is cognisant and responsive both to animal health and welfare policy but also the wider related SG policies including those relating to food and drink, food and health, sustainable economic growth, climate change and policies relating to public bodies in Scotland.

17 Impact on trade

- 17.1 International negotiations and trade agreements are currently a reserved matter on which Defra leads. Trade is undertaken on a UK basis and is underpinned by our animal health status as well as our surveillance, traceability and regulatory and enforcement systems. In trade discussions with other countries, and during the management of trade missions, it is essential that the UK can present a coherent and compelling narrative of how our trading partners requirements are being met.
- 17.2 Whilst it is important to recognise that there is currently significant variation across the UK in terms of legislation, enforcement, delivery and our underpinning systems which can present challenges to the UK narrative, the trade implications for Scotland and our UK partners must be an important consideration in determining the outcome of this review.
- 18 GB as a single epidemiological unit
- 18.1 The concept of the GB single epidemiological unit is often used as an argument to maintain the status quo. It is the case that the significant movements of animals throughout GB, particularly during some periods of the year, do present a risk of spreading animal diseases. Similarly, production and food chains are not defined by borders and can provide biosecurity risks. This was a key factor that prevented Scotland seeking 'Regionalisation' during the 2007 FMD outbreak as, despite the disease being contained within SE England, the complexity of managing the trade practices across the border were impractical and not cost effective.
- 18.2 However, there remain clear differences in the distribution of several animal diseases across GB. Scotland is officially free of bovine tuberculosis unlike significant parts of England and Wales. On the other hand, Scotland has a higher incidence of E. coli O157 than the rest of GB. The concept of a single epidemiological unit does not prevent animal disease control programs, such as the current BVD program, being initiated earlier in Scotland, or differently in different parts of GB. Neither does the presence of multiple delivery bodies on the Island of Ireland or on mainland Europe provide insurmountable difficulties in managing epidemic animal diseases across borders. Consequently, the concept of GB as a single epidemiological unit does not present a compelling argument against change. What is required is an understanding of the risks and a commitment within those

organisations responsible for animal health within GB and Northern Ireland to cooperate in mitigating those risks for their mutual benefit. It will be important as part of any process to manage this aspect of change appropriately.

19 Emergency response

- 19.1 Important lessons from previous outbreaks of exotic epidemic animal diseases include the need to maintain vigilance, be prepared, react with speed, apply a risk-based approach and to respect local knowledge.
- 19.2 The impact of any change to the current delivery model on the ability to address these lessons and to respond effectively to emergencies including exotic disease incursions is a key consideration in determining a future delivery option. Existing arrangements have served well although it is recognised that continual improvement is required not least due to evolving disease threats and the opportunities afforded by emerging technologies.
- 19.3 Recently APHA has responded to several small animal disease outbreaks, including the Avian Influenza outbreak near Dunfermline in 2016, which it has handled effectively. APHA has also improved strategic and tactical planning at a GB level. However, centralisation of planning has resulted in local staff reporting that they feel unsighted and the lack of contact with local stakeholders undermines field staff's confidence in the organisations ability to manage a more significant response.
- 19.4 Disease exercises are an important element of preparedness, Scottish stakeholders reported reduced involvement in exercises over recent years. Comment was also received that exercises tend to concentrate on one period, the immediate response to a report case, rather than examine the differing challenges within all stages of a response. This trend has resulted in reduced engagement with local stakeholders and a consequent reduction in local knowledge.
- 19.5 The reducing levels of expertise and capability in the field, due to the rapid turnover of veterinary and technical staff resulting in a dearth of experienced leadership is a significant concern that will impact on APHA's preparedness and ability to respond swiftly and effectively to a significant epidemic disease incursion. The reduced willingness of staff to go on 'detached duty', the move towards corporatisation of private veterinary practice and the disengagement with practitioners in the remote areas of Scotland could, unless managed, also provide challenges in mounting an effective response. It is difficult not to conclude that, at an operational level, the level of preparedness for a significant disease event is significantly less than was the case in 2001.
- 19.6 Scotland has historically been a 'net exporter' of resource to support disease eradication responses south of the border. This trend continues as demonstrated by the number and location of incursions of exotic disease within the UK since 2005.
- 19.7 Scotland also has a demonstrated track record of effective disease control management and response which was recognised in the inquiries into both the 2001 and 2007 FMD outbreaks. Outbreaks of Newcastle disease, Avian Influenza, an

incursion of brucellosis and the threat of Bluetongue have also been managed professionally in Scotland over the last two decades.

- 19.8 Much has been made of the ability to support small exotic disease outbreaks from within the GB pool of staff irrespective of location within GB. Whilst this is simple to manage within a single organisation with consistent systems and processes the move to a separate delivery body in Scotland would not preclude cooperation of this manner. Not least as there are significant benefits in mitigating the risks of the spread of disease to other parts of the UK, the impact on trade as well as the opportunity for the development of staff. In addition, it should be clear that there is a benefit in assisting other administrations on the understanding that such support would be available when required in the home administration. These considerations should encourage a co-operative approach between administrations in the future.
- 19.9 Other countries, for example Australia, manage this issue effectively through forward planning and national agreements. In Australia animal health delivery services are the responsibility of the individual jurisdictions. National agreements, managed by Animal Health Australia, set out the agreed response plans for different animal diseases and cost sharing agreements which ensure that jurisdictions and industry who benefit from the controls implemented contribute to the cost of those controls.
- 19.10 For more significant outbreaks it is less likely that support could or would be widely shared within government delivery services due to the local pressures that would need to be managed including the investigation of report cases, on farm follow up of tracings, implementation of licencing controls as well as the management of communications including stakeholder liaison. In these circumstances other options such as activating the international reserve and accessing veterinarians from other disciplines such as general practice, universities, industry through pre-agreed contracts would be utilised.
- 19.11 It is arguable that current arrangements come with some organisational risk in this space. For example, FMD in 2001 was initially confirmed in England and a significant proportion of the Scottish animal health staff were sent south of the border to assist with the response. When, subsequently, disease was identified in Scotland these staff were not relocated back to Scotland leaving operations under resourced to the detriment of the Scottish response.

20 National reference laboratories

- 20.1 There is a consistent view that Scotland should continue to utilise the national reference laboratory function of Weybridge (and although not within APHA, Pirbright) on the grounds of maintaining a centre of expertise and that the cost of replicating the infrastructure that would be required would be disproportionate. The Weybridge facility provides national reference services for antimicrobial resistance, animal by products feed testing, tuberculosis and a range of diagnostics for other exotic bacterial, viral and parasitic diseases.
- 20.2 APHA management have expressed the view that if a separate Scottish Veterinary Service were to be formed and that Scotland wished to continue to utilise

the services provided by Weybridge then this should be on a contractual and not on a pay as you go basis. This would allow certainty for business planning and continued investment in diagnostic development.

20.3 Austerity has impacted on the reference laboratories and the support of the devolved administrations is perceived as helpful when Defra approach the treasury for investment in the Weybridge facility. Changing operational arrangements should not impact on that support in the future.

21 Sharing of expertise

- 21.1 One of the strengths of the GB model is the access to expertise across administrations through the various laboratories and institutes, technical and field based or from programs such as EPIC¹. It will be important maintain and build on existing arrangements to ensure continuing benefit for all parties. Continued membership of UK forums such as the National Emergency Epidemiological Group (NEEG) and the field epidemiology group will assist in managing this issue. A strong collaborative approach will be required not least where there are areas of specialist knowledge held within one of the administrations. Lessons from the creation of FSS will be important in managing any change to animal health and welfare arrangements.
- 22 Flexibility/response time to changing Scottish policy or priorities
- 22.1 Scotland's size and small stakeholder community have enabled decisions regarding animal health and welfare to be taken and implemented quickly. This ability is important to manage emerging risks both to animal disease but also market sensitive concerns. The current model is perceived to be less responsive than it could be and that this review is seen as an opportunity to address this.

23 Regulation and enforcement

- 23.1 Regulation and enforcement, particularly in the area of animal welfare, is currently perceived as being disjointed, heavy handed and less effective than it could and should be. Enforcement is delivered by several government organisations, including local authorities, Police Scotland and the Scottish SPCA with no overarching strategy and suboptimal co-ordination of delivery. A recent initiative of embedding APHA enforcement officers in the FSS food crime unit has proved successful and could be expanded.
- 23.2 Local authorities are facing considerable financial challenges which in some cases has resulted in significant reduction to animal health and welfare enforcement. APHA has experienced a loss of experience and expertise which has also impacted on enforcement capability.
- 23.3 The lack of advice and immediate severe financial penalties through cross compliance was highlighted by industry as an area of concern, as was the lack of

¹ Centre of Expertise on Animal Disease Outbreaks (previously known as Epidemiology, Population health and Infectious diseases Control)

consistency of enforcement action which is perceived as unfair and dependent on locality.

- 23.4 Increasingly welfare standards are becoming a requirement for market access and trade, the EU is currently introducing welfare requirements for third countries. The current piecemeal approach to animal welfare enforcement could present a real risk to national access to markets in the future.
- 23.5 It is timely to review the approach to farm regulation and a move to establish an SVS could provide the opportunity to consider the possibility of brigading farm animal health and welfare enforcement within a single organisation which could provide strategic delivery based on better regulation principles. Such an approach could provide graduated response from advice through a spectrum of sanctions retaining prosecution as a last resort or for significant non compliances.
- 23.6 The Farm Inspection and Regulation Review chaired by Dame Glenys Stacey, albeit a report on farm regulation in England, provides valuable analysis on this subject.

24 Consistency

- 24.1 The issue of consistency is commonly raised by stakeholders. It is recognised that customers value a consistent approach both across borders but also within Scotland. Historically, the five Animal Health Divisional Offices in Scotland operated semi autonomously resulting in concerns being expressed relating to an uneven approach between areas. This impacted particularly on businesses that operated in more than one Animal Health Division. APHA has introduced management structures that have actively provided increased consistency. This initiative has also involved the centralisation of some functions for example export health certification, which has been well received by exporters.
- 24.2 However, whilst there has been recognition of some benefits of adopting a consistent approach concerns have been raised that a single approach does not fit all circumstances. An example often quoted is the current approach to the agency's engagement with local practitioners. In some of the remote parts of Scotland many practices have decided not to undertake OV work due to the high costs of training and validation and the low volume of work made available, due in part to the reduced bovine tuberculin testing requirement arising from Scotland's success in achieving officially TB free status. This disengagement has a potentially negative impact on passive surveillance as well as increasing the likelihood that practitioners from these areas may not provide support to future disease incursion responses.
- 24.3 There is also the sense of an opportunity missed in remote areas in that it is difficult for APHA to provide a comprehensive on call service particularly out of hours. Experience in other countries suggest that there are potential advantages in government services working closely with practitioners to reduce response times and to provide a triage approach to the identification of notifiable disease and welfare issues. This approach not only delivers benefits for government but helps provide support and critical mass for practices in remote areas which are often operating

under severe economic pressure. APHA has put in place alternative arrangements in Orkney which could be used as a model for delivery in other parts of Scotland.

- 24.4 In considering a future approach in Scotland there is a real opportunity to evaluate the contribution that private practitioners can make to delivering government outcomes. This may include the possibility of a synergistic approach to the future delivery of the Highlands and Islands Veterinary Services Scheme (HIVSS) with government services.
- 24.5 Other concerns raised with the consistency approach were that the Operations Manual, the mechanism for providing instructions to field staff, frequently did not reflect differences in Scottish legislation and policy and that where different delivery arrangements/priorities were required in Scotland these involved processes that were often slow to deliver.

25 Cost

- 25.1 The cost of delivery will clearly be an important consideration. It has proved very difficult to generate an accurate estimation of the costs of a future organisation as any estimate is extremely sensitive to the breadth of role and function and how a new model is organised and managed.
- 25.2 There may be value in considering whether an alternative funding approach is appropriate for a new organisation. Full cost recovery for services including the issuing of export health certification, approval of businesses for export has been suggested. One industry representative went further proposing that an SVS should be partially funded through an industry levy.

Options

26 Option 1 - Retain current arrangements with APHA

- 26.1 The current model of delivery of animal health and welfare services in Scotland has a track record of meeting its statutory responsibilities and of managing small incursions of exotic animal disease effectively. The advantages of retaining this approach centre around consistency in terms of the processes within GB but also in the development of the narrative to support international trade. Additionally, the ready access to and sharing of expertise is a strength although changing the delivery model does not preclude arrangements being agreed to ensure this approach going forward. Emergency preparedness at the strategic and tactical level are strong although operational preparedness, as evidenced by the reduced capability and capacity within Scotland and the reduced engagement with local stakeholders, is demonstrably weak. Current arrangements for emergency response in terms of field operations, surveillance and traceability are tried and tested and would need to be actively managed under a new approach.
- 26.2 However, several concerns were identified that would need to be addressed if SG decided to continue with this model of delivery.

- 26.3 There is a widely held perception that as a Defra agency, APHA are primarily focussed on English policies and priorities and that can result in a 'brake' being applied to progress in Scotland. Current priorities for APHA are delivering Brexit, which is clearly a UK issue, and the Godfray and Stacey reviews which are England only exercises. There is also a lack of cognisance within APHA of the Scottish Governments priorities, for example, there is limited awareness of the SG Animal Health and Welfare in the Livestock Industry: Strategy 2016 to 2021, a key document setting out ministerial expectations in Scotland. Providing formal arrangements for SG to have a role in the governance of APHA could assist in addressing these concerns.
- 26.4 APHA has implemented structures and processes to manage engagement with SG including the appointment of a relationship manager who is the APHA primary point of contact with SG. There are regular monthly and quarterly meetings with the CVO Scotland team to manage day to day business and Scottish issues are regularly discussed by the APHA board and the senior management team. There is less access to Ministers in Scotland when compared to Wales where the APHA management meet with the Agriculture Minister every six months to discuss priorities and progress whereas no such meeting had occurred in Scotland since the APHA was formed in 2014.
- 26.5 APHA does not have a strategic plan but is covered by the overarching Defra agency strategic plan which covers 32 organisations. Nor is there an APHA GB or Scottish business plan available to articulate current priorities and set out the direction of travel and how priorities are to be delivered. It is therefore difficult to assess how the work of APHA aligns with the policy priorities outlined in the SG strategy.
- 26.6 A further risk with current arrangements is that whilst the Scottish funding for APHA has remained constant for the past few years while Defra funding has reduced. This trend, if continued, will inevitably have a negative impact on delivery in Scotland as the core capability of APHA is reduced.
- 26.7 There appears to be difficulty experienced in embedding Scottish priorities into the work of APHA including redirecting staff activity to Scottish priorities as the processes for delivering change can be long and convoluted. The Operations Manual does not always reflect Scottish policy and legislation and GB wide policies such as the employment of OVs are not always fit for purpose in Scotland not least due to the challenges of engaging with practices in remote areas.
- 26.8 Scotland has traditionally been able to benefit from its small size enabling it to be agile and flexible in responding to challenges and adapting to change. Current arrangements do not appear to facilitate this way of working.
- 26.9 Local stakeholder engagement has been impacted by the centralisation of functions. This has undermined local relationships that are so important in managing emergency responses, particularly in remote areas. Further work would be required if this model were to be maintained to rebuild this engagement.

- 26.10 It is difficult to envisage a solution, within the current model, to the current recruitment and retention issues that have undermined capability within APHA in Scotland. The decrease in staff numbers and loss of expertise through the rapid turnover of staff leaves Scotland vulnerable to events out with business as usual including a significant disease incursion. Similarly, the lack of engagement with private practitioners particularly in the remote areas of Scotland has potentially negative impacts on surveillance and the willingness to support disease responses.
- 26.11 It would be difficult within current arrangements to modernise and streamline animal health and welfare enforcement in Scotland. This would be a missed opportunity to strengthen current arrangements to achieve increased effectiveness, consistency and to underpin Scotland's world-famous premium brands.
- 26.12 The CVO Scotland is accountable to the Scottish Parliament for animal health and welfare policy and delivery in Scotland. The current model does not provide the CVO with adequate transparency, clear lines of responsibility for delivery and the ability to easily refocus activities to address changing priorities.
- 26.13 This option would be largely cost neutral although investment could be considered to address the reduced capability within Scotland over the last decade which will impact on any future response activity.
- 26.14 Maintaining the status quo is a viable option but would not realise many of the benefits identified in the alternative models proposed.
- 27 Option 2 Create a Scottish Veterinary Service which would undertake the functions currently delivered by APHA
- 27.1 The creation of an SVS delivering the current animal health and welfare responsibilities of APHA in Scotland would align delivery with the devolved animal health and welfare policy competence of Scottish Ministers. It would enable an enhanced focus on Scottish priorities and provide transparency and clear accountability, authority and responsibility for the CVO Scotland on animal health and welfare matters and to build on the strong 'One Health' approach that exists in Scotland. Funding of an SVS would be the responsibility of SG and less likely to be impacted by reduced funding in other administrations.
- 27.2 The principle of establishing an SVS was broadly supported by stakeholders who considered that it would provide additional focus on Scottish issues, improved collaborative working and a vehicle for targeted investment to support the livestock industries.
- 27.3 Scotland's favourable bovine tuberculosis status means that an SVS would not be distracted by what is the major disease challenge in England and Wales. Rather it could concentrate on Scottish priorities including the control of endemic diseases including BVD which would enhance its disease status and support Scotland's premium brands and access to international markets. Scotland has a history of progressive animal health policies which have been developed in close collaboration with industry, an SVS would be well placed to support this approach in the future. Scotland's size and relatively small stakeholder community have enabled

an agile and flexible approach to animal health and welfare challenges in the past. An SVS would enhance this approach not least by reducing the current bureaucracy required to change priorities and/or focus.

- 27.4 International markets provide important outlets for Scottish producers. An SVS would ensure that responsibility and accountability for meeting the requirements of these markets sits within Scotland. As international trade is based on UK agreements it will be important that in the creation of a new body arrangements are agreed that both safeguard the other administrations who would be negatively impacted if Scotland did not meet its obligations and also to ensure that the new arrangements can be clearly articulated within the narrative that the UK has developed to explain our animal health and welfare systems and enforcement to the WTO, OIE and trading partners.
- 27.5 Disease response capability and arrangements are important considerations. An SVS will need to develop strong links with APHA, Defra, and the Welsh and Northern Irish Administrations to manage cross border incidents and to ensure that requirements for control strategies and proof of freedom are consistent with international expectations. Much of that structure exists currently but needs to be formalised and documented going forward to give comfort to all administrations.
- 27.6 Stronger links with the SG emergency planning machinery and the rebuilding of operational preparedness including stakeholder networks could be enhanced under the SVS model. Concern has been expressed regarding the reduction in disease preparedness exercises involving partner organisations and stakeholders and the narrowness of scope. There is a desire for pan Scotland emergency exercises in which an SVS would be well placed to participate.
- 27.7 An important opportunity will be the ability to address the recruitment and retention issues thereby increasing capability and allowing improved succession planning. An SVS will also be able to determine the response capability that is required to manage the animal health risks to Scotland.
- 27.8 There is no argument on either capability or value for money to replicate in Scotland the existing UK reference laboratory infrastructure at Weybridge, Lasswade or Pirbright. Several budgets currently fund this work, some have been devolved and some held on a GB basis.
- 27.9 For accountability and to ensure transparency it is recommended that all remaining GB budgets are devolved. To allow APHA to manage the reference laboratory and research work and to invest in developing testing and other technology contracts should be developed to articulate the services required and the SG financial commitment for this work.
- 27.10 A key risk in establishing an SVS is to ensure adequate access to technical expertise. Due to the specialist nature of the work in state veterinary medicine there are often few individuals with specialist expertise across the administrations. It is in the interests of all administrations that this is managed effectively going forward. There are already several forums that provide access to the expertise necessary to manage business as usual as well as response activity. Arrangements need to be

agreed to manage this resource in the future. It is likely that the Veterinary Adviser requirement within the CVO unit will need to be increased to provide technical support, training and policy advice to operations staff within the SVS.

- 27.11 APHA has consolidated several functions including traceability, export health certification, VENDU and management of the Operations Manual. In transitioning to an SVS these functions need to be managed. It should be the long-term aim that these functions are brought within the SVS but there may be value in purchasing some or all these functions in the short term. ScotEID will be the repository for all animal movements in Scotland, when cattle are fully integrated, in the summer of 2021. At that point it would be appropriate for tracing work within Scotland to be coordinated within the SVS including the work currently undertaken by the Scottish Animal Movement Unit in Dumfries.
- 27.12 Corporate support including HR, finance and IT will be required for an SVS and it is envisaged that this would be provided through the existing SG arrangements. It will be important that IT systems required for disease management, surveillance and traceability have the capability to communicate effectively between administrations to ensure effective working both on an ongoing basis but importantly during responses.
- 27.13 An SVS which mirrors the functions currently delivered by APHA, as a standalone body, is less likely to be able to effectively implement revised and efficient enforcement arrangements that could be delivered by the bespoke model proposed in Option 3.
- 27.14 The on-going cost of this option is difficult to quantify but should not be materially different from current costs. There will be one-off costs associated with the set-up of the new organisation including IT and pension liability, Overhead costs are likely to increase but efficiencies will be realised through the ScotEID program. Decisions on staff complement and disease preparedness will also impact on the overall cost.
- 28 Option 3 Create a new Scottish Veterinary Service which provides a bespoke model of delivery of animal health and welfare services in Scotland
- 28.1 There was strong support from Scottish stakeholders for the creation of an SVS with a clear consensus that SG should take the opportunity to create a bespoke Scottish organisation that covered a full range of animal health, veterinary public health and welfare delivery responsibilities providing a co-ordinated farm to fork approach. The key drivers were seen to be consistency, both geographically as well as in implementation across inspectorate functions, resilience, co-ordination and business efficiency. It was also considered that such a co-ordinated approach would support international market access and provide a coherent and logical approach to operational delivery, inspection and enforcement in Scotland. Such an approach could provide the opportunity to redefine the relationship between government and industry which could lead to greater ownership and proactivity by the livestock sector.

- 28.2 There was no single view on what functions such a bespoke service would encompass but the following responsibilities were raised as functions that could reside within such an organisation:
 - Operations currently delivered by APHA;
 - · FSS meat inspection and shellfish toxin testing;
 - SRUC surveillance:
 - LA animal health and welfare enforcement;
 - Poultry Inspection;
 - RPID Scottish Animal Movement Unit and the rabies officer;
 - Fish Health; and
 - Bee Health.
- 28.3 In addition, there was consensus that the creation of a bespoke SVS provided an opportunity to review the relationship with private practitioners including engagement through the HIVSS and Official Veterinarian network, and to build on existing relationships with Universities, Health Protection Scotland, SEPA and the Border Force.
- 28.4 Many of the opportunities and challenges for this option mirror those in Option 2, however, there are some additional compelling arguments to support a bespoke Scottish SVS. Amalgamation of bodies working in this space will result in a more consistent approach with better resource utilisation and will deliver synergies and efficiencies. Industry has long argued that there are inefficiencies in meat inspection as there are no alternative functions within FSS to allocate staff to when they are not being utilised full time. Similarly, with the challenges of geography inspectors from different organisations can be dispatched to different tasks within the same remote area involving duplication of travel time. The larger organisation would be better able to manage emergency responses from within its own resources.
- 28.5 Stakeholders also thought that there would be valuable data sharing and learning opportunities between the different constituent parts of a new organisation and some sectors expressed the view that access to veterinary expertise to augment the service provided by their current inspectorate would add significant value.
- 28.6 Option 3 would also provide an organisation that could provide increased job satisfaction through broader roles as well as clearer career structures with more opportunity for advancement. The transition to the SG family would also enhance career opportunities for administrative staff. These benefits would assist recruitment and retention as well as allowing improved management of succession planning.
- 28.7 A bespoke SVS also provides the opportunity for a fundamental rethink of inspection and enforcement within the animal health and welfare space. Many stakeholders are concerned that current arrangements are piecemeal, vary between locations, are inconsistent, do not comply with better regulation principles and result in multiple footfall on individual premises. Bringing inspection and enforcement responsibilities together within a single centre of expertise would allow the development of capability, ensure uniformity of approach including consistency with better regulation principles, drive synergies and efficiency and reduce the number of visits to premises. Such an arrangement would allow clear lines of communication

and delineation of responsibilities with non-government organisations including the Scottish SPCA. An effective inspection and enforcement body would also support Scotland's animal health and welfare claims which underpin international market access including trade in our premium brands.

- 28.8 Whilst this option is more challenging and will require considerable effort to deliver the benefits identified the resulting organisation will deliver significantly better outcomes for the Scottish livestock industry and consumers. Neither is such an approach unprecedented with similar arrangements to those being proposed in place in Northern Ireland and internationally.
- 28.9 Option 3 will require additional funding although the quantum is difficult to determine without agreeing the constituent parts of the organisation and analysing what, if any resources would accompany a transfer of responsibilities. Overheads to support corporate functions will be required, however, efficiencies will result in savings that could contribute to the overall budget of the organisation.

Section 5 – Areas for further work to inform decision making

During the process of the review it became apparent that further in-depth work was required to assess current arrangements and to assist with the process of decision making on, and the implementation of, the optimal model for the future delivery of operations services in Scotland.

Whichever model Scottish Ministers select the following work will be required:

29 Budgets

29.1 Following the devolution of animal health and welfare funding in 2011 a small number of budgets were retained, on a GB basis, by Defra. It has not been possible as part of this process to fully elucidate the details of the GB budgets, what these deliver and what Scotland's 'share' of this money amounts to. Work is required to fully understand these arrangements with the view to fully devolve animal health and welfare budgets at the earliest opportunity. This would align budgets with policy responsibility resulting in appropriate accountability for the effective use of this resource.

30 Traceability

30.1 Consideration is required regarding Scotland's future tracing delivery. ScotEID becomes fully functional in the summer of 2021. The four-way reporting capability allied with its interoperability with market, abattoir and on-farm software enables ScotEID to deliver excellent individual animal traceability. Whilst the current arrangements through the centralised services in Cardiff provide adequate support, there could be considerable advantages in having single traceability capability within Scotland which would include the work currently undertaken by APHA and the Scottish Animal Movement Unit managed by RPID and based in Dumfries. This could include reduced cost, an ability to focus on Scottish priorities and to enhance support for endemic disease eradication schemes and market access particularly through the premium Scottish brands.

31 Official Veterinarian (OV) engagement

31.1 Current arrangements do not appear to fit well with Scottish requirements. APHA have introduced specific arrangements for delivery in Orkney which might provide a way forward on the mainland. Further work is required to understand current constraints and the drivers that are impacting on veterinary practices with the view to strengthen arrangements in the future. Other countries, including in Scandinavia, face similar difficulties of delivery in remote areas and have developed solutions that might be applied in the Scottish context.

If the decision is taken to create an SVS then the following additional work will be required:

32 Role of a Scottish Veterinary Service

32.1 The future roles and responsibilities of an SVS need to be determined. Option 2 would require less development in that the SVS would, with minor modifications, mirror the work currently delivered by APHA in Scotland. Scottish stakeholders were overwhelmingly of the view that this approach would represent a missed opportunity. Option 3 could deliver a very different organisation. A range of functions has been suggested for inclusion if this option is progressed including the opportunity to create a centre of excellence for enforcement. Further work, including extensive consultation will be required to identify which functions should sit within this bespoke model.

33 Structure

- 33.1 This work would be undertaken once a decision has been made on which option Ministers prefer and will need to be consistent with public bodies policy in Scotland. Organisational design and structure will be an important element of the work required to create a successful new body and done well it could help to address some of the difficulties associated with recruitment, retention and succession planning currently experienced by APHA. There was agreement during the consultation exercise that an SVS should report to the CVO Scotland.
- 34 Provision of corporate support including IT
- 34.1 Arrangements for corporate support will need to be agreed to support a future SVS. The assumption is that SG's HR, Finance and H&S systems will be utilised by the new organisation, however, this needs to be confirmed and the implications of transition identified and managed. IT is a more complex consideration. Whilst SG IT can be utilised as the main platform for the new organisation work needs to be undertaken to map the complex landscape of databases within the animal health and welfare sphere to ensure a fully joined up approach going forward.

35 Centralised services

35.1 Several functions within APHA are delivered by centralised services. This approach has allowed the development of expertise and has resulted in the consistent delivery of services. These services include traceability, discussed above, the issuing of Export Health Certification, VENDU and the production and maintenance of the Operations Manual. The medium-term aim should be to embed these functions within the SVS, but the timing of this transition needs to be considered with the option of purchasing these services in the short term, if deemed appropriate, explored.

36 Reference laboratories

36.1 There is no technical, operational or economic argument for Scotland not to continue to utilise the diagnostic capability of the UK national reference laboratories in the future. Contracts for the ongoing provision of these services will be required to provide certainty for all parties. These agreements will need to cover the areas of work currently funded on a GB basis when these budgets are fully devolved.

37 Framework agreements

37.1 Animal health and welfare issues do not respect boundaries and can have an impact on trade which is UK based. Consequently, it will be important that an SVS maintains strong links and working agreements with our partners within the UK. This can be managed through the development of a series of framework agreements in areas including cross border arrangements, disease response, international trade, traceability, access to expertise etc. These would set out expectations and outline the support mechanisms in place between the administrations to facilitate the management of mutual interests.

38 Staff consultation

- 38.1 An important element of work in developing an SVS will be to manage the expectations and concerns of staff both within the new body but also within the other organisations affected by the change. Extensive consultation and involvement of staff in the change process will be required to maintain morale and to address these issues.
- 38.2 The creation of a Scottish Veterinary Service would be a major undertaking that will require extensive planning and consultation. The outcomes of the further work identified above will inform and support the transition and maximise the benefits of this exciting opportunity.

Section 6 - Conclusions and recommendations

- 39.1 Both a GB or Scottish approach to animal health and welfare operations services are viable options going forward. For a GB model to be effective greater effort will be required to ensure that Scottish policy requirements and priorities are recognised and delivered. This will be increasingly important in a post Brexit era where legislative and policy divergence is likely not least due to differing farming conditions, disease control priorities and target markets. Such an organisation would require improved communication between Scottish Government and APHA and a governance structure that recognises the role of SG as a key customer and funder.
- 39.2 The creation of a Scottish Veterinary Service presents an exciting opportunity to improve and modernise animal health and welfare operational delivery in Scotland. It would allow local ownership of delivery and ensure close alignment between policy and delivery. It would be more focussed and flexible allowing rapid redeployment of resources to address changing priorities.
- 39.3 In undertaking the review process into current and potential arrangements in Scotland the following recommendations have been developed:

Recommendation 1 – the creation of a stand-alone Scottish animal health and welfare delivery body would best meet Scotland's long-term interests.

Recommendation 2 –the transition to a separate Scottish Veterinary Service provides an opportunity to deliver efficiencies and enhanced service excellence through the formation of a bespoke delivery body with a wider range of functions than that currently delivered by APHA in Scotland. Additional areas for consideration could include, but not be limited to; meat hygiene inspection, animal feed controls, scanning surveillance, aquatic disease control, bee health as well as a greater clarity and responsibility for farmed animal health and welfare enforcement.

Recommendation 3 - a Scottish Veterinary Service should report directly to the CVO Scotland.

Recommendation 4 – the CVO Scotland will require adequate support structures to manage these additional responsibilities including business and project management expertise.

Recommendation 5 – the transition to, and future maintenance of, the Scottish Veterinary Service will require adequate resourcing to ensure that the requirements of Scotland's important livestock and food and drink sectors are safeguarded.

Recommendation 6 – the remaining budgets held by Defra on a GB basis should be devolved to increase transparency, ensure alignment with policy, and allow effective management to ensure value for money.

Recommendation 7 – Scotland should continue to utilise the Pirbright and Weybridge UK reference laboratories for the diagnosis of exotic notifiable diseases. Suitable arrangements will need to be implemented to ensure that change does not have a

negative impact on the ability of these laboratories to deliver these essential functions.

Recommendation 8 – further work will be required to ensure a successful transition to a new body with minimal risk to both Scotland and other UK administrations. This will include consideration of how functions including, traceability, Export Health Certification, the Operations Manual (some of which are currently centralised), will be delivered.

Recommendation 9 – documented agreements will need to be developed to ensure joined up delivery of surveillance, disease incursion response, trade agreements and the support for audits by trading partners.

Recommendation 10 – as part of the work to develop a future Scottish Veterinary Service consideration should be given to existing models in Northern Ireland and internationally. Models that address similar challenges, industry and trading patterns including the Scandinavian countries and New Zealand could provide valuable insights to inform this exercise.

ANNEX 1

REVIEW OF FIELD DELIVERY OF ANIMAL HEALTH SERVICES IN SCOTLAND

TERMS OF REFERENCE:

Background

- 1. This project will review the field delivery of animal health and welfare services currently provided by the Animal and Plant Health Agency (APHA) in Scotland.
- 2. Scottish Government is responsible for animal health and welfare policy. After devolution of parts of the GB the Animal Health and Welfare budgets were devolved to Scottish Government in April 2011. The "Concordat on animal health and welfare matters between (1) the Secretary of State for Environment, Food and Rural Affairs (2) the Scottish Ministers and (3) the Welsh Ministers" provided an undertaking that Scottish Government would continue funding APHA for least the duration of the Spending Review period starting in April 2011 and ending in March 2015.
- Scottish Ministers pledged to work with livestock keepers to get the best value from the devolved budgets and to continue building on the good progress made across several animal health issues in Scotland in recent years.
- 4. Scottish Ministers committed to carrying out a review to consider the way forward. This review will need to carefully consider the diverse nature of APHA, and the benefits Scotland receives from being part of a GB organisation.

Aim

- 5. The review will consider whether it would be most beneficial for Scottish Ministers to either retain some or all the existing services delivered by the APHA, or create a Scottish Veterinary Service by:
 - Identifying advantages and disadvantages of each option;
 - Outlining one or more alternative delivery models; and
 - Identifying critical areas where further work may be required to allow Ministers to make an informed decision
- 6. The reviewer may also identify activities and operations by APHA (other than the Scottish APHA Field Service), or other organisations in the field of animal health and veterinary controls, that may also be considered for delivery by a potential Scottish Veterinary Service.

Objectives

- 7. The research objectives for this project are to:
 - Assess the current cost and infrastructure of the field delivery of animal health and welfare services delivered by the Animal and Plant Health Agency (APHA) in Scotland.
 - Review whether the existing staff numbers are adequate in order to deliver an efficient and resilient service.
 - Provide recommendations for the future delivery of animal health and welfare field services delivered by the Animal and Plant Health Agency (APHA) in Scotland.

Methods

- 8. It is anticipated that this review will comprise of a mixture of desk-based and face to face interviews.
- 9. It may include surveys of users and/or providers of the current services and analyses of animal health risks, environmental risks, economics, market forces and new technological solutions.

Research Outputs

- 10. the successful candidate will provide the Scottish Government with the following outputs:
- An oral presentation of their research findings to the Scottish Government by 27 December 2019.
- A first draft of the report, which should contain an executive summary, in a format compatible with Microsoft Word by 31 December 2019.
- A final report, which should contain an executive summary in a format compatible with Microsoft Word, by 10 January 2020.
- The final report should provide recommendations for the Scottish Government regarding the delivery of field services, in line with the aim and objectives of the project.

ANNEX 2 – LIST OF ORGANISATIONS AND INDIVIDUALS INTERVIEWED

Animal and Plant Health Agency (APHA)

British Veterinary Association (BVA)

Chief Veterinary Officer (CVO) Northern Ireland

Chief Veterinary Officer (CVO) UK

Chief Veterinary Officer (CVO) Wales

Food Standards Scotland (FSS)

Hallmark Scotland

Jim Scudamore

Livestock Health Scotland

Local Authorities

Moredun Foundation

National Farmers Union (NFU) Scotland

Quality Meat Scotland (QMS)

SAOS (Scottish Agricultural Organisation Society) Ltd

Scottish SPCA

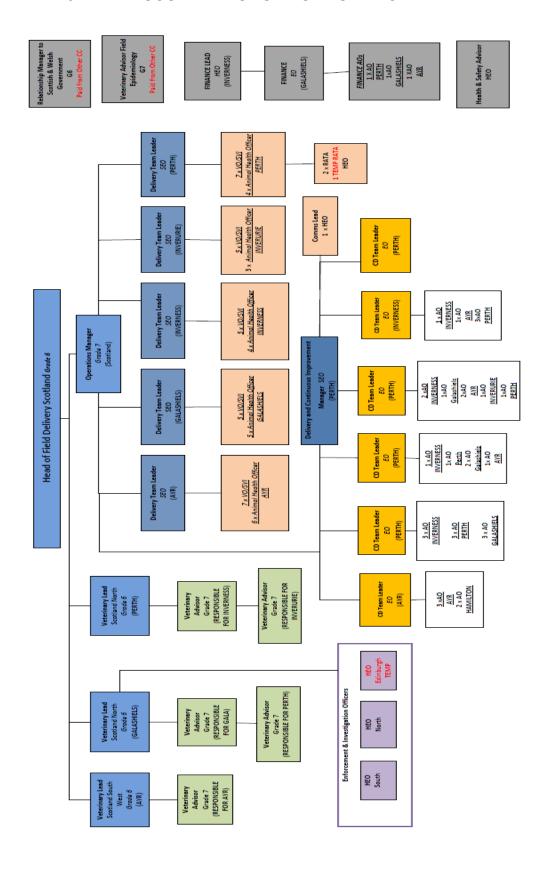
Scottish Association of Meat Wholesalers

Scottish Government (SG)

Scottish Salmon Producers' Organisation

Scotland's Rural College (SRUC)

ANNEX 3 – APHA SCOTLAND ORGANISATIONAL CHART



ANNEX 4 – LEGISLATION WHICH APHA CURRENTLY ENFORCES IN SCOTLAND

Great Britain	
Animals and Animal Products (Examination for Residues and Maximum	2015 No. 787
Residue Limits) (England and Scotland) Regulations 2015	2010110.707
Animal Health Act 1981 as Amended and incorporating additions inserted by	1981 (c.22)
the Animal Health Act 2002 in England and Wales and inserted by the Animal	,
Health and Welfare (Scotland) Act 2006	
Animal Health and Welfare Act 1984 (Section 10)	1984 (c.40)
The Animal Health (Miscellaneous Fees) Regulations 2013	2013 1240
Animal Welfare Act 2006	2006 (c.45)
Animals (Miscellaneous Provisions) Order 1927	1927 No. 290
Animals (Miscellaneous Provisions) Order 1938	1938 No. 5694
Animals (Post-Import Control) Order 1995	1995 No. 2439
Anthrax Order 1991 Artificial Insemination of Pigs (EEC) Regulations 1992	1991 No. 2814 1992 No. 3161
Aujeszky's Disease Order 1983	1983 No. 344
Bovine Embryo (Collection, Production and Transfer) Regulations 1995	1995 No. 2478
Cattle Plague Order 1928	1928 No. 206
Common Agricultural Policy (Control and Enforcement, Cross-Compliance,	2014 No. 3263
Scrutiny of Transactions and Appeals) Regulations 2014	
Diseases of Animals (Seizure) Order 1993	1993 No. 1685
Diseases of Swine Regulations 2014	2014 No 1894
Equine Viral Arteritis Order 1995	1995 No. 1755
European Communities Act 1972	1972 (c.68)
Export of Horses (Excepted Cases) Order 1969	1969 No. 1742
Export of Horses (Protection) Order 1969	1969 No. 1784
Export of Horses (Veterinary Examination) Order 1966	1966 No. 507
Export of Horses and Ponies (Increase in Minimum Values) Order 1978 Export Quarantine Stations (Regulation) Order 1973	1978 No. 1748 1973 No. 824
Food Safety Act 1990	1973 No. 824 1990 (c.16)
Importation of Animal Products and Poultry Products Order 1980	1980 No. 14
Importation of Animals Order 1977 (Articles 4(1), 5(6), 5(7), 6 & 15 Do Not	1977 No. 944
Apply to England and Scotland)	
Importation of Animals Pathogens Order 1980	1980 No. 1212
Importation of Birds, Poultry and Hatching Eggs Order 1979	1979 No. 1702
Importation of Embryos, Ova and Semen Order 1980	1980 No. 12
Importation of Hay and Straw Order 1979	1979 No.1703
Infectious Diseases of Horses Order 1987	1987 No. 790
Movement of Animals (Records) Order 1960	1960 No. 105
Non-Commercial Movement of Pet Animals Order 2011	2011 No. 2883 2009 No. 842
Organic Products Regulations 2009 Pleuro-Pneumonia Order 1928	1928 No. 205
Poultry (Seizure of Hatching Eggs) Order 1990	1990 No. 232
Psittacosis or Ornithosis Order 1953	1953 No. 38
Rabies (Compensation) Order 1976	1976 No. 2195
Rabies (Control) Order 1974	1974 No. 2212
Rabies (Importation of Dogs, Cats and Other Mammals) Order 1974	1974 No. 2211
Slaughter of Poultry Act 1967 (Revoked in Scotland)	1967 (c.24)
Slaughterhouses Act 1974	1974 (c.3)
Specified Diseases (Notification & Slaughter) Order 1992 INSERTED	1992 No. 3159
Specified Diseases (Notifications) Order 1996	1996 No. 2628
Veterinary Medicines Regulations 2013	2013 No. 2033
Veterinary Surgery (Artificial Insemination) Order 2010	1966 (c.36)
Veterinary Surgery (Artificial Insemination) Order 2010 Veterinary Surgery (Epidural Anaesthesia of Bovines) Order 2010	2010 No. 2059 2010 No. 2058
Veterinary Surgery (Exemptions) Order 2015	2010 No. 2036 2015 No. 772
Veterinary Surgery (Exemptions) Order 2013 Veterinary Surgery (Rectal Ultrasound Scanning of Bovines) Order 2010	2010 No. 2056
Veterinary Surgery (Testing for Tuberculosis in Bovines) Order 2005	2005 No. 2015
Veterinary Surgery (Vaccination of Badgers Against Tuberculosis) Order 2010	2010 No. 580
Veterinary Surgery (Wing & Web Tagging) Order 2009	2009 No. 1217

Welfare of Animals at Markets Order 1990 Welfare of Horses at Markets (and Other Places of Sale) Order 1990 Zoonoses Order 1988 Zoonoses Order 1989 Scotland	1990 No. 2628 1990 No. 2627 1988 No. 2264 1989 No. 285
African Horse Sickness (Scotland) Order 2012 Animal By-Products (Enforcement) (Scotland) Regulations 2013 Animal By-Products and Pet Passport Fees (Scotland) Regulations 2018 Animal Health and Welfare (Scotland) Act 2006 The Animal Health (Miscellaneous Fees and Amendments) (Scotland) Artificial Insemination of Pigs (Scotland) Regulations 1964 Avian Influenza (H5N1 in Poultry) (Scotland) Order 2007 Avian Influenza (H5N1 in Wild Birds) (Scotland) Order 2007 Avian Influenza (Preventive Measures in Zoos) (Scotland) Regulations 2005 Avian Influenza (Preventive Measures) (Scotland) Order 2007	2012 No. 178 2013 No. 307 2018 No. 176 2006 asp 11 2013 151 1964 No. 1171 2007 No. 62 2007 No. 61 2005 No. 531 2007 No. 69
Avian Influenza (Slaughter & Vaccination) (Scotland) Regulations 2006 Avian Influenza (Survey Powers) (Scotland) Regulations 2004 Avian Influenza and Influenza of Avian Origin in Mammals (Scotland) Order Bluetongue (Scotland) Order 2012 Bovine Semen (Scotland) Regulations 2007	2006 No. 337 2004 No. 453 2006 No. 336 2012 No. 199 2007 No. 330
Bovine Viral Diarrhoea (Scotland) Order 2013 Brucellosis (Scotland) Order 2009 Cattle Identification (Scotland) Regulations 2007 Control of Salmonella in Poultry (Breeding, Laying & Broiler Flocks) (Scotland) Control of Salmonella in Turkey Flocks (Scotland) Order 2009 Disease Control (Interim Measures) (Scotland) Order 2002	2015 No. 3 2009 No. 232 2007 No. 174 2009 No. 229 2009 No. 417 2002 No. 34
Diseases of Animals (Approved Disinfectants) (Scotland) Order 2008 Diseases of Poultry (Scotland) Order 2003 Eggs and Chicks (Scotland) (No 2) Regulations 2008 Enzootic Bovine Leukosis (Scotland) Regulation 2000 Export of Pigs, Porcine Material and Bovine Animals (Scotland) Regulations	2008 No. 219 2003 No. 354 2008 No. 395 2000 No. 365 2000 No. 300
Fish Farming Business (Record Keeping) (Scotland) Order 2008 Foot and Mouth Disease (Ascertainment of Value) (Scotland) (No.4) Order Foot and Mouth Disease (Scotland) Order 2006 Foot and Mouth Disease (Slaughter & Vaccination) (Scotland) Regulations Horse Identification (Scotland) Regulations 2009	2008 No. 326 2001 No. 297 2006 No. 44 2006 No. 45 2009 No. 231
Horses (Sea-Transport) Order 1952 (Articles 14 & 15 Do Not Apply to Licensing of Animal Dealers (Young Cats & Young Dogs) (Scotland) Markets, Sales and Lairs Order 1925 Microchipping of Dogs (Scotland) Regulations 2016 Movement of Animals (Restrictions) (Scotland) Order 2003 Older Cattle (Disposal) (Scotland) Regulations 2006	1952 No. 1291 2009 No. 141 1925 No. 1349 2016 No. 58 2003 No. 353 2006 No. 4
Pigs (Records, Identification and Movement) Order 1995 Pigs (Records, Identification and Movement) (Scotland) Order 2011 Poultry Compartments (Fees) (Scotland) Order 2010 Poultry Compartments (Scotland) Order 2010 Products of Animal Origin (Disease Control) (Scotland) Order 2008	1995 No. 11 2011 No. 327 2010 No. 151 2010 No. 150 2008 No. 158
Protection of Animals (Anaesthetics) Act 1954 Prohibited Procedures on Protected Animals (Exemptions) (Scotland) Registration of Establishments Keeping Laying Hens (Scotland) Regulations Salmonella in Broiler Flocks (Sampling Powers) (Scotland) Regulations 2005 Salmonella in Laying Flocks (Sampling Powers) (Scotland) Regulations 2004 Sheep and Goats (Records, Identification & Movement) (Scotland) Order 2009	1954 (c.46) 2010 No. 387 2003 No. 576 2005 No. 496 2004 No. 536 2009 No. 414
Sheep Scab (Scotland) Order 2010 Sheep Scab (Shetland Isles) Order 2003 Slaughter of Animals (Scotland) Act 1980 Specified Animal Pathogens (Scotland) Order 2009 The Animal Health (Miscellaneous Fees) (Scotland) Regulations 2018	2010 No. 419 2003 No. 202 1980 (c.13) 2009 No. 45 2018 No. 177
The Zootechnical Standards (Scotland) Regulations 2019	2019 No. 5

Trade in Animals and Related Products (Scotland) Regulations 2012	2012 No. 177
Transit of Animals Order 1927 (4425) (Articles 1, 2, 8, 21, 22, 23, 27 & 28 Do	1927 No. 289
Transmissible Spongiform Encephalopathies (Scotland) Regulations 2010	2010 No. 177
Transport of Animals (Cleansing & Disinfection) (Scotland) Regulations 2005	2005 No. 653
Tuberculosis (Scotland) Order 2007	2007 No. 147
Tuberculosis in Specified Animals (Scotland) Order 2015	2015 No. 327
Warble Fly (Scotland) Order 1982	1982 No. 207
Welfare of Animals (Slaughter or Killing) Regulations 1995	1995 No 731
Welfare of Animals (Transport) (Scotland) Regulations 2006	2006 No. 606
Welfare of Animals at the Time of Killing (Scotland) Regulations 2012	2012 No. 321
Welfare of Farmed Animals (Scotland) Regulations 2010	2010 No. 388
Zoonoses (Monitoring) (Scotland) Regulations 2007	2007 No .420

ANNEX 5 – GLOSSARY

AHO – Animal Health Officer

AHVLA – Animal Health and Veterinary Laboratories Agency

APHA – Animal and Plant Health Agency

BVA - British Veterinary Association

BVD - Bovine Viral Diarrhoea

CVO - Chief Veterinary Officer

Defra – Department of Environment, and Rural Affairs

EPIC – Epidemiology, Population health and Infectious diseases Control

FSS - Food Standards Scotland

HPS - Health protection Scotland

HIVSS - Highland and Islands Veterinary Services Scheme

MRI - Morden Research Institute

NEEG – National Emergency Epidemiology Group

NFUS - National Farmers Union Scotland

OV - Official Veterinarian

PGI - Protected Geographical Indication

QMS - Quality Meat Scotland

SAMW - Scottish Association of Meat Wholesalers

SAOS - Scottish Agricultural Organisation Society Ltd

SEPA – Scottish Environment Protection Agency

SG – Scottish Government

SRUC – Scotland's Rural College

Scottish SPCA – Scottish Society for the Prevention of Cruelty to Animals

SSPO - Scottish Salmon Producers' Organisation

SVS – Scottish Veterinary Service

TSE - Transmissible Spongiform Encephalopathies

VA – Veterinary Adviser

VENDU – Veterinary Exotic Notifiable Disease Unit

VI - Veterinary Inspector

VIC – Veterinary Investigation Centre

VO – Veterinary Officer

ANNEX 6 - REFERENCES

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The Scottish Government St Andrew's House Edinburgh EH1 3DG

ISBN: 978-1-83960-484-3 (web only)

Published by The Scottish Government, January 2020

Produced for The Scottish Government by APS Group Scotland, 21 Tennant Street, Edinburgh EH6 5NA PPDAS682315 (01/20)

www.gov.scot