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Tool for the evaluation of Performance of Veterinary Services

oie PVS Tool

PVS Evaluation Report

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Republic of South Africa

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OIE PVS EVALUATION

REPORT OF THE

VETERINARY SERVICES OF

THE REPUBLIC OF SOUTH AFRICA

1st – 19th October 2012

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List of acronyms, abbreviations and/or special terms

AACL	Animal Anti-cruelty League
ACSA	Airport Corporation of South Africa
AFASA	African Farmers Association of South Africa
AH	Animal Health
AHF	Animal Heath Forum
AHT	Animal health technician
AIDA	Animal Identification Act of 2002
ASF	African swine fever
BCOCC	Border control Operational Coordination committee
BST	Bovince Somatrotopin Hormone
BVD	Bovine Viral Diarrhoea
CCS	Compulsory Community Service
CPD	Continuous Profession Devellpment
CSF	Classical swine fever
CVC	Community Veterinary Clinic
CVL	Central Veterinary Laboratory
CVO	Chief Veterinary Officer
DAFF	Department of Agriculture, Forestry and Fisheries
DAH	Directorate Animal Health
DARD	Department of Agriculture and Rural Development (NW Province)
DG	Director-General of DoA
DoA	Department of Agriculture of South Africa
DoH	Department of Health
DORT	Disaster and Outbreak Response Team
DVS	Director of Veterinary Services – Chief Veterinary Officer (CVO)
EC	Eastern Cape province
ELISA	Enzyme linked immunosorbent assay
EAEVE	European Association of Establishments for Veterinary Education
EVA	Equine Viral Arthritis
FAHDM	Food Animal Health Disaster Management
FMD	Foot and Mouth Disease
FS	Free State
GP	Gauteng province
HAS	Hygiene Assessment System
HOD	Provincial Head of Department of Agriculture, Conservation and Environment
HPAI	Highly Pathogenic Avian influenza
HPCSA	Health Professional Council of South Africa
IMQAS	International Meat Quality Assurance Service
KNP	Kruger National Park
KZN	Kwazulu Natal province
LAPG	Large Animal Practitioners Group; sub-group of SAVA
LIMS	Livestock Identification Management System
MCC	Medicine Control Council
MCHRD	Ministerial Committee on Human Resource Development
MEDUNSA	Medical University of South African (the black former vet school)
MoE	Ministry of Education
MoF	Ministry of Fisheries
MPO	Milk Producers Organisation
MTEF	Medium-term Expenditure Framework (within DAFF)
NAFA	National African Farmers Union
NC	Northen Cape province
NICD	National Institute of Communicable Diseases
ND	Newcastle disease

NERPO	National Emerging Farmers Red-meat Producers Organisation
NFR	National Farmer Register
NGO	Non Governmental Organisaiton
NICD	national institute of Communicable Disease
NSPCA	National Society for the Prevention of Cruelty to Animals
NW	North West province
NZ	New Zealand
OBP	Onderstpoort Biological Products (company)
OIE	World Organisation for Animal Health
OIE-PVS	OIE Performance of Veterinary Services Evaluation Tool
OVAH	Onderstepoort Veterinary Academic Hospital
OVF	Onderstepoort Veterinary Faculty of the University of Pretoria
OVI	Onderstepoort Veterinary Institute
PAHC	Primary Animal Health Care
PD	Provincial Director
PDA	Provincial Department of Agriculture
PDSA	Peoples Dispensary for Sick Animals
PEO	Provincial Executive Officer
PRRS	Porcine Reproductive and Respiratory Syndrome
RMAA	Red-meat Abattoir Assocation
RPO	Red-meat Producers Organisation
RSA	Republic of South Africa
RTI	Road Traffic Inspectorate
RVF	Rift Valey Fever
SA	South Africa
SAAHA	South African Animal Health Association
SABS	South African Bureau of Standards
SADC	Southern African Development Community
SAMIC	South African Meat Industry Company
SANAS	South African National Accreditation System
SANDF	South African National Defense Force
SAOBC	South African Ostrich Business Chamber
SAPA	South African Poultry Association
SAPPO	South African Pig Producers Association
SAPS	South African Police Service
SARS	South African Revenue Service
SASVA	South African State Veterinary Assocation
SAT	South African types (FMD)
SAVC	South African Veterinary Council
SOPs	Standard Operating Procedures
SPCA	Society for Protection of Cruelty against Animals
SPS	Sanitary and Phyto sanitary Agreements
SVD	Swine vesicular disease
TBD	Trans-boundary disease
UK	United Kingdom
US	United States of America
VLU	Veterinary Livestock Unit
VS	Veterinary Service(s)
VPH	Veterinary Public Health
VPN	Veterinary Procedures Notice
VSB	Veterinary Statutory Body (see OIE Code definition)
WC	Western Cape province

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The OIE PVS expert team for South Africa would like to thank all who assisted with the PVS Evaluation mission and made their time in South Africa such a comfortable, productive and memorable experience. The commitment and dedication of the South African Veterinary Services staff towards our visit was exemplary, demonstrated in the completeness of the pre-mission data provided and the prompt responses to requests during the mission.

Firstly, we thank the Deputy Minister, the Honorable Mr Mulder and the OIE Delegate, Dr Modisane, for their high level support of the visit and for meeting with us to share their animal health policy perspectives as guiding context for our work. We gratefully acknowledge the commitment to high level planning that may utilise our findings as follow-up to this report.

Secondly, we thank the Director of Animal Health, Dr Maja, and the Director of Veterinary Public Health, Dr Songabe, for their active participation in all aspects of the mission and their leadership in responding to our many requests for assistance with organisational and information needs.

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Finally, we thank all the other representatives of the South African Veterinary Services and their stakeholders that we met and interviewed during our visit; including provincial state veterinary and veterinary paraprofessional staff, laboratory staff, border post staff, abattoir managers and staff, private veterinarians and commercial and communal farmer organisations and farmers. Almost without exception we found a strong willingness to openly share information, documentation and opinions, which greatly assisted us in our task.

We dedicate this report to you all and hope you find it of use.

PART I: EXECUTIVE SUMMARY

I.1 Introduction

At the request of the South African OIE Delegate, an OIE PVS Evaluation mission was conducted from 1st October to 19th October 2012 by a PVS expert team of Dr Eric Fermet-Quinet (PVS team leader), Dr Emilio Leon (PVS expert), Dr Julia Punderson (PVS expert) and Dr John Stratton (PVS expert). Dr Patrick Bastiaensen joined the team as an OIE observer and assisted with the final week of the mission.

The stability and development of many countries depends on the performance of their agricultural sectors. The Veterinary Services (VS) play a vital role by enhancing national food security, protecting livestock from disease, facilitating market access for livestock and their products and protecting people from foodborne and other zoonoses. To meet these challenges and opportunities, it is essential that the VS are of high quality, are appropriately resourced, technically competent and independent, and work closely with stakeholders and promote access to markets.

For national VS to achieve their objectives and to support compliance with OIE international standards, the OIE has developed the Performance of Veterinary Services (PVS) Pathway. The PVS Pathway is designed to assist VS establish their current level of performance and identify gaps in their ability to comply with OIE international standards. The PVS Pathway comprises an “Evaluation”, “Gap Analysis” and ongoing support for national development based on the PVS findings.

PVS evaluations assess VS capabilities at national level using internationally agreed criteria set out in the OIE Terrestrial Animal Health Code. The PVS Pathway works closely with stakeholders, including the private sector, to develop a shared vision, establishes priorities and strategic initiatives geared towards meeting national animal health, veterinary public health and trade objectives.

The South African VS have managed a number of major animal disease issues and events with important national implications over recent years:

- South Africa lost its FMD free zone status and access to important export markets following an FMD outbreak in 2011. Eradicating this outbreak and proving freedom was challenging and South Africa is only now attempting to regain its official FMD free zone status.
- The on-going outbreak of notifiable avian influenza in ostriches has restricted market access for poultry and ostrich products. Bringing the outbreak under control is challenging because of the extensive ostrich farming practices.
- The recent occurrence and eradication of disease outbreaks such as Classical Swine Fever, PRRS, African Swine Fever, Rift Valley Fever also illustrate the challenges that the South African VS is experiencing.
- Endemic livestock diseases including tick borne diseases (Heartwater, redwater, anaplasmosis, etc), lumpy skin disease, sheep scab and Newcastle disease, bluetongue and others continue to have significant impact on farmers and livestock industries.
- Zoonoses including bovine brucellosis, bovine tuberculosis, anthrax and rabies remain endemic and continue to threaten human health.

Considering these major animal health threats and the numerous challenges facing the VS South Africa requested an OIE PVS evaluation. This request was endorsed by the Parliamentary Portfolio Committee on Agriculture, Forestry and Fisheries, reflecting the high priority of improving the national VS. It is understood that South Africa will consider the OIE

PVS Evaluation findings in the development of high level strategic planning for VS improvement.

I.2 Key findings of the evaluation

I.2.A Human, physical and financial resources

In general terms, human, physical and financial resources of the VS are adequate and regularly provided and maintained, although there are variations between provinces.

There is a lack of veterinarians in regular contact with farms and animals, especially in extensive commercial systems and in small holders or communal areas; there are also a limited number of veterinarians who conduct on site inspections of animal processing facilties. This limits the ability to certify products and activities in compliance with OIE standards and/or import requirements, and limits the expansion of export markets. It also reduces the sensitivity of the passive surveillance early detection system.

Although veterinary para-professionals are well supervised by veterinarians, the VS over-rely on para-professionals in all activity areas. The KPMG consultancy recommendation of a ratio of six veterinary para-professionals per veterinarian is regarded as too high as a strategic option to pave the way for a modern VS working in a context of development of farmers's organisation responsibility, consumers' wishes for higher standards in public health, and international trade.

Onderstepoort Veterinary Faculty is internationally recognised as a first class veterinary teaching school. It has recently increased the number of graduates to meet increasing demands. The school is currently investing in harmonising the veterinary curriculum within SADC. As in many developed countries, the highly selective process of recruiting students and long study duration may create unrealistic expectations of high income from veterinary practice; in South Africa, along with cultural impacts, it also fails to ensure a geographically and ethnically representative distribution of students; this impacts negatively on the distribution of veterinarians between the different production systems and geographic areas. This has led some provinces to send students to be trained abroad with possible downgrading of their technical capabilities.

Veterinary para-professionals initial training is considered excellent. However, the number of graduates is excess to requirements and leads to a high rate of unemployment – this may lead to development of informal veterinary activities.

Continuing education is a prerequisite to maintaining registration of veterinarians by the VSB: it is widely provided in the public sector.

The technical independence of the VS of South Africa is well supported by the quality of veterinarians and their level of remuneration, but is coming under increasing pressure. Technical independence is being challenged by the break in the chain of command of the VS, where external influences can impact decision-making and prioritisation, the system of food safety inspection is influenced by commercial interests and most disease control activities are driven by market interests.

Constitutional change has introduced a break in the chain of command in the VS as it has become the "concurrent" responsibility of both national and provincial political authorities. This break in command is universal except in cases of national emergency, for border inspection and for import control. In some provinces the chain of command is further broken between the provincial VS and the district and/or municipality levels exacerbating the problem further. In this so-called "matrix" system, veterinary services are governed alongside all the other agricultural services at local

level. This approach has been implemented despite the recognised inability of such matrix systems to deliver animal health regulatory services in developing countries.

Changes in the DAFF structure have led to a central organisation chart based on administrative expedience rather than on function. For example the public health directorate oversees animal identification, veterinary hygiene and welfare, while border inspection and import quarantine services are managed under a separate chief directorate.

The breaks in the chain of command negatively affect authority and the capability of the VS in all domains. This lowers the level of advancement and/or is described as a weakness in many of the critical competencies of the OIE PVS evaluation.

This has contributed to a loss of rigour in most official animal health programmes that can no longer be implemented in a consistent, compulsory and coordinated manner throughout the country. Experience has shown that even the “emergency” chain of command did not function properly in the management of the last FMD outbreak where FMD control was not always prioritised appropriately at the local level.

External coordination with other public institutions (especially customs, wildlife and security) are considered effective at most levels, but could be improved with DoH on the control of zoonoses, veterinary medicines, residues and food safety.

Physical resources appear satisfactory and well maintained throughout the VS. The VS are not able to provide the breakdown and distribution of their physical and financial resources at all levels, - this was provided for human resources. Some provinces have access to advanced equipment; other provinces have some difficulties in maintaining their offices, laboratories and vehicles

Financial resources appear to be adequate and are provided regularly throughout the VS, but the effect of the recent cost-cutting measures has not become apparent yet. As most programmes are not compulsory or implemented nationally, there is an over-reliance on voluntary, cost recovery which effectively limits the budget.

Data management is generally effective and widely utilised. However the break in the chain of command limits data collation, analysis and reporting at central level. The data is not being used to develop comparative, efficacy, efficiency and cost benefit analyses for animal health programmes. This hampers the capability of the VS to advocate for the development and funding of new programmes. Importantly, although raw data are available in many AHT sub-offices, no data are collated to provide the information on non-commercial farmers and animals. This restricts effective planning of national programmes. Emerging and communal farmers or livestock owners are still not recognised individually and are not integrated fully into VS national programmes.

I.2.B Technical authority and capability

The VS have access to a comprehensive range of laboratory diagnostics through suitable national laboratories, supported by private laboratories that have been approved by DAFF. The OVI and some private laboratories have received ISO 17025 certification and the provincial laboratories are progressively developing assurance programmes. Quality assurance is being applied in all laboratories.

Risk analysis is regularly used, mainly for imports; there is no dedicated unit of designated staff for the adoption of a full range of risk assessments. Current definition of animal production systems (commercial, emerging, communal and subsistence) is only based on their historical socio-economical background. This limits the development of official animal health programmes using risk analysis to set priorities based on multifactorial definition of animal production systems.

Border control and quarantine inspection are very good; however they are not regularly audited to assess resources and procedures. This function is not under the same directorate as import/export certification and this complicates procedures and results in less effective data management and information flow between technical and operational staff.

Passive surveillance and early detection are implemented mainly through the field network of public AHT sub-offices and by private veterinarians (without official delegation). The lack of veterinarians in regular contact with farms and animals in the field reduces the credibility and the sensitivity of passive surveillance and early detection. There are no specific detailed passive surveillance procedures and programmes for any prioritised disease. The break in the chain of command also hampers the surveillance system as technical staff may be side-tracked to more generic agricultural extension work.

Active surveillance programmes are in place for a few prioritised diseases and are rigorously designed. The break in the chain of command leads to variation in implementation between provinces.

Rapid response by the VS to outbreaks has usually been effective; detailed contingency planning needs to be more comprehensive. Outbreak investigation is an important part of the work of state veterinarians; there is a lack of comprehensive programmes for the prevention, control and eradication of endemic diseases. The broken chain of command resulted in delays and inconsistencies in the management of the last FMD and ASF outbreaks. Though the constitution supports a national response in cases of emergency, the chain of command cannot be simply and quickly restored at local level for early detection and rapid response.

National disease prevention, control and eradication programmes are virtually non-existent with the exception of FMD; all other diseases are controlled through a market driven approach which farmers may not adopt or may not have access to the required services. Many of these activities qualify as “joint programmes”. No efficacy or efficiency analyses were provided to the mission, nor are these analyses being developed to progress towards national prevention, control or eradication.

The food safety mandate of the VS is limited to meat safety, accreditation of all slaughter facilities and slaughter inspection; in addition, the VS provide accreditation and auditing of food inspection of facilities processing all animal products for export. Non-export processing facilities are under the mandate of DoH. This process of registration and inspection of facilities is quite effective as well as the auditing of food safety inspection process in export animal products processing facilities. A deficiency is that the human health certificates for staff working in food processing are provided by DoH without consideration of any VS specific human health requirements.

Slaughter inspection for the national (domestic) market is not technically independent. Owners of slaughter facilities pay meat inspectors (first slaughter inspection to discard carcasses with potential problems) either directly or through private companies that are governed by the meat industry. They also directly pay private veterinarians, who are not bound by official delegation (only registered at provincial VS), to implement furtther inspection on selected carcasses with potential problems; moreover, this second inspection is done only on request of the meat inspector and is not systematic. Furthermore, the performance of these private veterinarians is not regularly monitored or audited by VS.

Registration, audit and on-site inspection of animal product processing facilities for the national market are done under the municipal authority of DoH. This creates a different standard for international and domestic consumers. From the field interviews and evidence collected, this audit and inspection process appears to be of far lower quality compared to the VS one. Inspections are done by Environmental Health

Officers without apparent effective supervision by veterinary professionals and with risks of a lack of technical independence from commercial interests.

Registration of veterinary medicines is well managed and protects the country from importing poor quality veterinary medicines and biologics, but regulations do not allow comprehensive control over drug distribution and usage; according to several veterinarians interviewed during the field mission, this leads to increasing problems of resistance to antibiotics and parasiticides sold over-the-counter, and should raise stronger concerns about the effects on animal health and production as well as on public health (residues, antimicrobial-resistance). Deficiencies were mentioned during interviews.relating to inappropriate use and efficacy of vaccines (including cold chain) which are also sold over the counter. There is insufficient external coordination with the DoH on scheduled medicines.

Residue testing control programmes are only enforced for the purposes of export, which leads to a different standard where national consumers are not as well protected. There are efforts underway to develop a more comprehensive national programme.

Feed safety could not be assessed in detail during the mission, but appears to be secured only for export purposes.

Animal identification and traceability of animal products are supported by general legislation, but are not widely implemented. Individual identification is implemented only for ostriches, horses in the free zone, buffaloes and stud animals, and on a market-driven basis for animal products. There is no comprehensive registration of livestock owners. This deficiency limits disease control efforts, especially for FMD, TB and brucellosis where even non-free zone and positive animals are not being systematically branded to support movement control of disease.

Animal welfare concerns are a high priority for parts of South African society and many NGOs are involved. The current legislation is out-dated, not harmonised with OIE standards; there are no dedicated staff addressing animal welfare in the VS.

I.2.C Interaction with interested parties

Communication with interested parties is well supported but does not address small holders and communal farmers with sufficient specific material.

There is formal structured consultation with stakeholders nationally, less at provincial and district levels. The need for more consultation has led the interested parties to establish new forums for consultation.

Official representation of the VS in OIE and other international institutions is regular though there is insufficient consultation with the relevant parties.

The lack of official delegation to private veterinarians (except for export slaughterhouses) is an important weakness of the VS. This approach fails to provide a clear chain of command for the VS and does not support the technical independence of the private veterinarians who undertake activities such as meat inspection and TB and brucellosis testing. This also prevents the VS taking advantage of this available workforce, their physical resources and networks to strengthen and develop national control programmes.

The South Africa Veterinary Council registers and regulates all veterinarians and veterinary para-professionals, requires continuing education to maintain registration and applies penalties if necessary. It does not yet register the large number of meat inspectors in the country, who are however registered by the Human Health Professions Council.

Virtually all animal health "scheduled activities" implemented by the VS, with the exception of FMD control, may be considered as joint programmes as they rely on voluntary participation and cost-recovery. However, interested parties are usually consulted only to organise implementation, but are not trained to participate activitely.

I.2.D Access to markets

Internal and external quality of legislation and regulations is satisfactory, although there is no dedicated legal staff to update regulations regularly or to develop a more accessible format. Legislation and regulations are generally well applied and penalties are imposed, except when the programmes have been continued without any consideration of the current conditions making them now impossible to implement. The break in the chain of command makes it difficult to implement veterinary legislation consistently throughout the country. Harmonisation with neighbouring countries or international legislation is well implemented.

International certification by the VS is recognised by trading partners. The limited number veterinarians in regular direct contact with farms and animals will hamper the capacity of the VS to certify products or activities.

South Africa has established many sanitary agreements with foreign countries.

South Africa has a long history of transparency with international institutions, including regular notifications to OIE. The notification process should be audited more regularly, as it lacks sensitivity due to the limited contact of veterinarians with farms and animals.

Zoning has previously been successfully implemented for FMD, ASF and AHS, and has been recognised by trading partners. FMD zoning was challenged by the last outbreak and the break in the chain of command is considered one reason for the failure of zoning and the loss of the FMD-free zone status. AHS zoning is questioned by some representatives of the horse owners as being overly focused on the export and race industry lobbies.

Compartmentalisation has been successfully implemented for PRRS, FMD, ASF and CSF in pigs and has been recognised by some trading partners. Compartments have also been implemented for poultry and notifiable avian influenza, and are being further considered for ostriches.

Table 1: Summary of OIE PVS evaluation results

PVS results summary of South Africa	Result
I. HUMAN, PHYSICAL AND FINANCIAL RESOURCES	
I.1.A. Staffing: Veterinarians and other professionals	5
I.1.B. Staffing: Veterinary paraprofessionals and other	4
I.2.A. Professional competencies of veterinarians	5
I.2.B. Competencies of veterinary paraprofessionals	4
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I-4. Technical independence	3
I-5. Stability of structures and sustainability of policies	2
I-6.A. Internal coordination (chain of command)	2
I-6.B. External coordination	3
I-7. Physical resources	4
I-8. Operational funding	4
I-9. Emergency funding	4
I-10. Capital investment	4
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II-1.B. Suitability of national laboratory infrastructures	5
II-2. Laboratory quality assurance	4
II-3. Risk analysis	3
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II-9. Veterinary medicines and biological	2
II-10. Residue testing	3
II-11. Animal feed safety	2
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IV-1. Preparation of legislation and regulations	4
IV-2. Implementation of legislation and regulations and compliance	3
IV-3. International harmonisation	4
IV-4. International certification	4
IV-5. Equivalence and other types of sanitary agreements	4
IV-6. Transparency	4
IV-7. Zoning	5
IV-8. Compartmentalisation	4

I.3 Key recommendations

I.3.A Human, physical and financial resources

The VS should establish clear strategy, policy and supportive measures to develop a more comprehensive network of veterinarians in the field with regular contact with farms and animals. The strategy should consider official delegation for all national animal health programmes as a major tool to develop the network of private veterinarians. It may be also consider that in some remote areas, the public VS could apply cost recovery for some private veterinary activies, including distribution and sale of veterinary medicines

Such policies should also clearly differentiate activities linked to official programmes established to control zoonotic diseases, epizootic diseases or diseases of major economic importance which need to be tackled in a common and rigorous manner considering their public health impact, from services that benefit only individuals. Primary animal health care for the most vulnerable and less structured interest groups should clearly be limited to support specific measures for official programmes (e.g. specific awareness and tools, specific subsidies for testing and control, specific official delegation for regular visits, etc), and not include activities such as free clinical services or veterinary medicines. The proposed “compulsory community service” should support implementation of coherent policies, such as developing the private veterinary network and recruiting more public staff where needed, as a transition measure.

The central level VS require more staff to undertake their core mission for effective national planning and auditing. National, provincial and district levels should monitor their need for human resources in order to avoid a future “generation gap” and consequential “loss of instutitional memory”. A national strategy to recruit and retain graduates in the public VS should include “scarce skills” categories and “occupation specific dispensation” to promote career opportunities and specilization.

The Onderstepoort Veterinary Faculty should strengthen its investment in SADC veterinary faculties to ensure a high standard of initial training and that the appropriate number of graduates is provided to meet the needs of regional integration.

The needs for veterinary para-professionals should be re-evaluated taking into account OIE standards and the demands for a modern VS and livestock sector.

Technical independence should be systematically evaluated in all area activities as a fundamental principle of quality of the VS. This includes the important issue of the management of human resources for food safety.

Considering the diverse epidemiological, geographical, political and socio-economical contexts of South Africa, the optimal strategy is to restore the national chain of command for all aspects of the VS – as is the current situation with plant health, the police and military. Dividing responsibilities and functions between national and provincial VS authorities inevitably results in a loss of information, inability to react promptly, and inconsistency in implementation and prevents flexibility in addressing veterinary risks. A direct chain of command needs to define the necessary authority and responsibility at each level of the VS to ensure that efficacy, efficiency and adaptability to evolving and diverse situations is achieved. At central level, reorganisation of the directorates and sub-directorates should be considered to ensure that all the aspects of VS are coordinated under the same authority; this reorganisation must address AH and VPH including zoonoses, residues, veterinary medicines and food safety, animal welfare, border inspection and export certification, identification and traceability and laboratory services.

External coordination with DoH should be improved and harmonised, especially for zoonoses, food safety and veterinary medicines control; ideally such functions should be incorporated fully within the VS mandate.

The VS should have information on the geographical and functional distribution of its physical and financial resources, according to the OIE standards - as is available for its human resources.

The VS should be provided with greater control over the national VS budget to develop national AH programmes and to recover the technical independence for VPH.

Part of the additional financial resources required should be provided by the national treasury; this is necessary for the recruitment of extra staff at central and provincial levels, and for the development of national VPH programmes (residues testing and usage of veterinary medicines). This may be accomplished in part through specific "identified" budget provided to the provinces. Much of the additional budget necessary for AH and VPH programmes should be gathered through industry levies instead of the current "direct payments" by farmers to private entities. Such levies should be established in such a way that all farmers/livestock owners can comply with official programmes.

Data management of resources and operations should be nationally integrated to support the chain of command. The VS should develop comparative, efficacy, efficiency and cost/benefit analysis for its operations to defend current activities and for expanded operations.

I.3.B Technical authority and capability

The multiple laboratories in some provinces should be rationalised. All provincial laboratories should receive adequate resources to implement and maintain appropriate processes for quality assurance.

The VS should appoint staff dedicated to risk analysis at central and provincial levels. Developing risk analysis should start with the characterisation of all production systems in the country using a multifactorial approach – by species, breed, number, feeding, land management, in-take and off-take, reproduction, inputs, self-consumption, marketing, earning, social background and context, education, etc.

Border inspection and quarantine should be audited to ensure effectiveness and to increase efficiency, as well as determining resources required.

Passive surveillance and early detection should be improved by creating a network of veterinarians in both the public and private sectors working in the field, under authority of the VS, that regularly visit farms and animals.

Animal disease prevention, control and eradication programmes should be prioritised for some diseases (e.g. TB, brucellosis). They should be implemented on a consistent compulsory manner throughout the country, with specific strategies, detailed procedures and additional financial resources where necessary. These programmes should be regularly evaluated for their efficacy, efficiency and cost/benefits.

Technical independence should be re-established for food safety either by appointing staff to the public VS or by developing official delegation to private veterinarians; this should include systematic on-site secondary slaughter inspections by veterinarians, and independent payment procedures through public fees or levies. External coordination and harmonisation of inspection processes should be implemented with DoH for the food safety of animal products processing and distribution in order to ensure that the same food safety standards applied to exports are available for national consumers.

Regulation of veterinary medicines and biologicals should be revised to ensure prudent usage to limit the development of resistance and potential impacts on public health, in addition to complying with export or domestic market requirements. This may include restricting over-the-counter sales, ensuring regular farm visits by veterinarians to prescribe scheduled veterinary medicines, or even completely banning the use of some substances.

Residue testing and control should be expanded to the domestic market to ensure the same protection for consumers as is provided to importing countries.

Feed safety should be further investigated and official control programme developed.

Animal identification and traceability should be gradually established in consultation with stakeholders. It should start with the registration of all livestock owners. Systematic identification of all animals in FMD non-free zones or tested positive for TB or brucellosis should be enforced.

Traceability of products of animal origin should be assigned to VS authority with coordination of activities with DoH.

Animal welfare should be provided with a designated point of contact at national and provincial levels; legislation should be updated to harmonise with OIE standards.

I.3.C Interaction with interested parties

Specific communication tools should be established to target all categories of interested parties, especially non-commercial farmers.

Formal consultation mechanisms with interested parties should be established at national and provincial level along the lines of the of the AH Forum initiative. Such consultations should increase involvement of all interested parties in providing comments on international regulations when the VS are officially represented.

The development of official delegation to private veterinarians is fundamental to increasing the capacity of the VS and making it more efficient by using the available human and physical resources of the private sector. Detailed procedures, including quality control of actvities, should be established for any official delegation. Official delegation could be developed for animal health programmes, slaughter inspection, and export certification. Public funds should be allocated and might be used to subsidise access for remote commercial farms, emerging, communal or subsistence farmers.

The SAVC should register meat inspectors as veterinary para-professionals, and not necessarily register other non-veterinary professionals e.g., non-veterinary scientists at laboratories.

Joint programmes should be developed for important diseases not prioritised in mandatory animal health programmes. This should include public awareness and training of farmers, especially non-commercial livestock owners.

I.3.D Access to markets

The VS should recruit legal staff to adequately update its legislation and make its regulations easier to understand. Some legislation should be reviewed and harmonised (e.g. animal welfare). AH regulations should be progressively modified to develop prioritized animal health programmes based on risk assessments.

International certification and transparency should be improved by increasing the number of field veterinarians; this will allow access to new markets and the development of new sanitary agreements.

Zoning should be re-assessed and audited to sustain efficacy and efficiency. It should be allow recognition by trading partners and/or OIE in order to recover FMD status.

Compartmentalisation should be supported, but not at the risk of diverting scarce human resources of the VS from public interests to private interests.

PART II: CONDUCT OF THE EVALUATION

II.1 OIE PVS Tool: method, objectives and scope of the evaluation

To assist countries establish their current level of performance, form a shared vision, establish priorities and carry out strategic initiatives, the OIE has developed an evaluation tool, the OIE Tool for the Evaluation of Performance of Veterinary Services (OIE PVS Tool[1]) which comprises four fundamental components:

- Human, physical and financial resources
- Technical authority and capability
- Interaction with interested parties
- Access to markets.

These four fundamental components encompass 47 critical competencies, for each of which five qualitative levels of advancement are described. For each critical competency, a list of suggested indicators was used by the OIE Evaluation Team to help determine the level of advancement.

A glossary of terms is provided in Appendix 2.

The report follows the structure of the OIE PVS Tool and the reader is encouraged to consult that document to obtain a good understanding of the context in which the evaluation was conducted.

The objective and scope of the OIE PVS evaluation includes all aspects relevant to the OIE Terrestrial Animal Health Code and the quality of Veterinary Services. In addition, the scope and objectives were clarified before the mission (see Appendix 7) as appropriate to the mandate and context of the VS in this country.

II.2 Country information (geography, administration, agriculture and livestock)

Note - Taken from pre-mission information provided by the South African Veterinary Services, agricultural information and statistics available on the DAFF website: http://www.daff.gov.za/ and country information and statistics available on: http://en.wikipedia.org/wiki/South_Africa

General Information

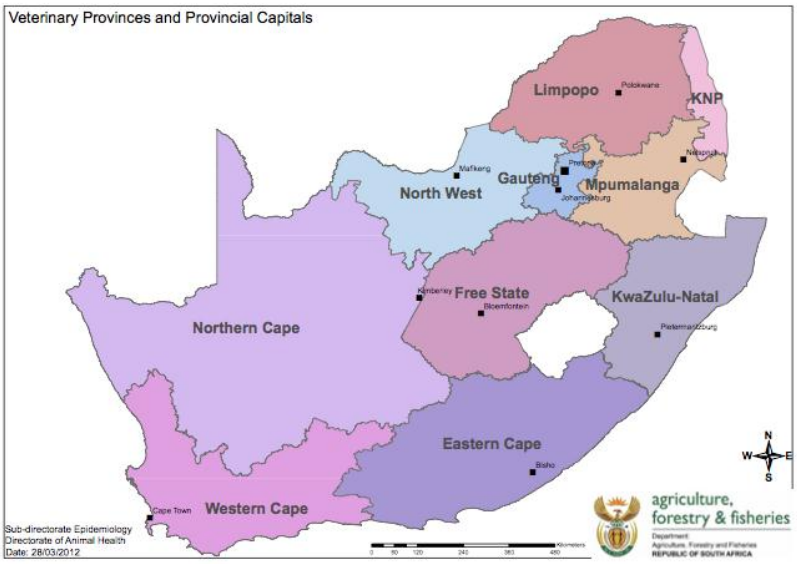
South Africa, officially the Republic of South Africa, is a country located at the southern tip of Africa. It is divided into nine provinces; Gauteng, Mpumalanga, Limpopo, Eastern Cape, Western Cape, Northern Cape, KwaZulu-Natal, North West and Free State. To the north lie the neighbouring countries of Namibia, Botswana and Zimbabwe; to the east are Mozambique and Swaziland; while Lesotho is an enclave surrounded by South African territory. South Africa is the 25th largest country in the world by area and the 24th most populous country with over 48 million people.

South Africa is a multi-ethnic nation and has diverse cultures and languages. Eleven official languages are recognised in the constitution. Two of these languages are of European origin: South African English and Afrikaans. Though English is commonly used in public and commercial life, it is only the fifth most-spoken home language. All ethnic and language groups have political representation in the country's constitutional democracy comprising a parliamentary republic; unlike most parliamentary republics, the positions of head of state and head of government are merged in a parliament-dependent President.

[1] Available at http://www.oie.int/eng/oie/organisation/en_vet_eval_tool.htm?e1d2

About 79.5% of the South African population is of black African ancestry, divided among a variety of ethnic groups speaking different Bantu languages, nine of which have official status. South Africa also contains the largest communities of European, Asian, and racially mixed ancestry in Africa.

South Africa is ranked as an upper-middle income economy by the World Bank. It has the largest economy in Africa, and the 28th-largest in the world. In terms of purchasing power parity, South Africa has the 5th highest per capita income in Africa, it is considered as a newly industrialised country. However, about a quarter of the population is unemployed and lives on less than US$1.25 a day.



Topography and Climate

The interior of South Africa is a vast, flat, and sparsely populated scrubland, the Karoo, which is drier towards the northwest along the Namib desert. In contrast, the eastern coastline is lush and well-watered, which produces a climate similar to the tropics.

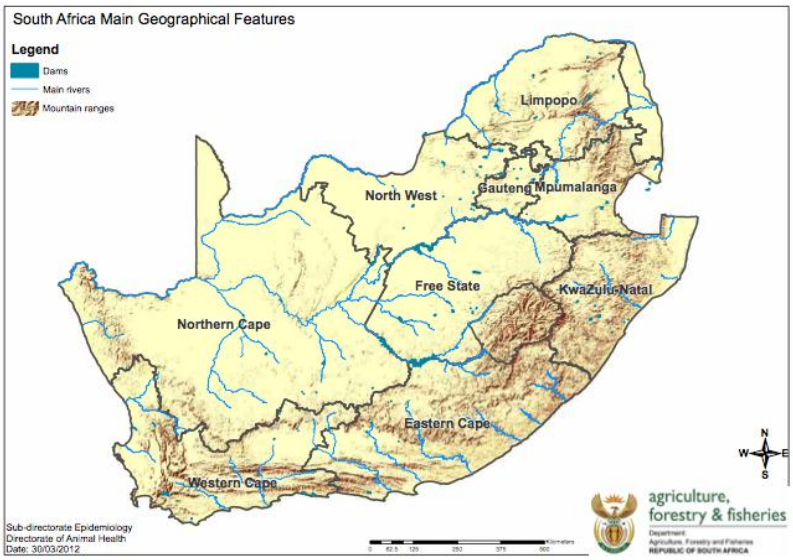
To the north of Johannesburg, the altitude drops beyond the escarpment of the Highveld, and turns into the lower lying Bushveld, an area of mixed dry forest and an abundance of wildlife. East of the Highveld, beyond the eastern escarpment, the Lowveld stretches towards the Indian Ocean. It has particularly high temperatures, and is also the location of extensive subtropical agriculture.

South Africa has a generally temperate climate, as it is surrounded by the Atlantic and Indian Oceans on three sides, its location is in the climatically milder southern hemisphere and due to the average elevation rising steadily towards the north (towards the equator) and further inland. Due to this varied topography and the oceanic influence, a great variety of climatic zones exist. The climatic zones range from the extreme desert of the southern Namib in the farthest northwest to the lush subtropical climate in the east along the Mozambique border and the Indian Ocean. Winters in South Africa are between June and August.

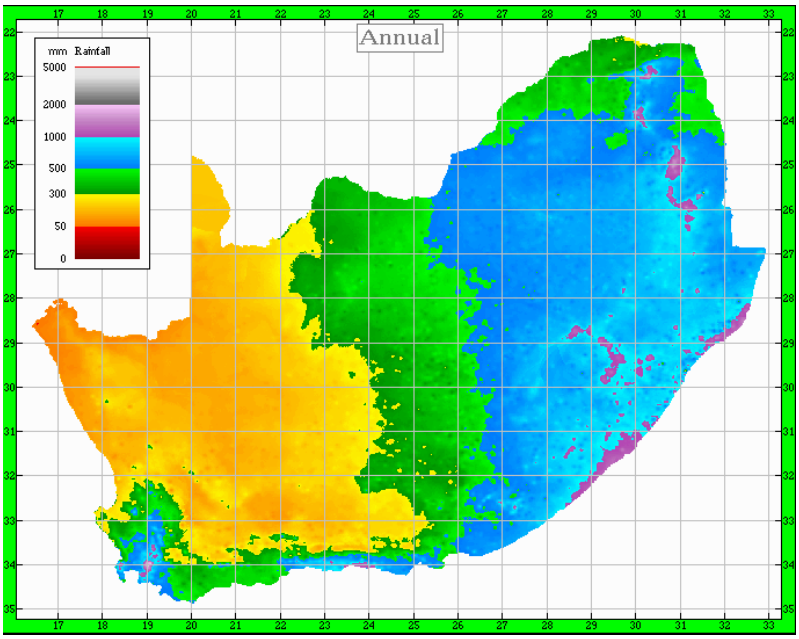
The extreme southwest has a climate remarkably similar to that of the Mediterranean with wet winters and hot, dry summers, hosting the famous Fynbos biome of shrubland and thicket. This region is also known particularly for its wind, which blows intermittently almost all year round. Further east on the south coast, rainfall is distributed more evenly throughout the year, producing a green landscape. This area is popularly known as the Garden Route.

The Free State is particularly flat and lies centrally on a high plateau. North of the Vaal River, the Highveld becomes better watered and does not experience subtropical extremes of heat. Johannesburg, in the centre of the Highveld, is situated at 1,740 m (5,709 ft) and receives an annual rainfall of 760 mm (29.9 in). Winters in this region are cold, although snow is rare.

The high Drakensberg mountains form the south-eastern escarpment of the Highveld. The coldest place in South Africa is Sutherland in the western Roggeveld Mountains, where midwinter temperatures can reach as low as −15 °C (5 °F). The deep interior has the hottest temperatures with the official highest temperature 48.8C recorded at Vioolsdrif on January 1993.



Map of Average Annual Rainfall in South Africa - taken from the South Africa Rainfall atlas website: http://134.76.173.220/rainfall/index.html



Governance and Administration

South Africa is a parliamentary republic, although unlike most such republics the President is both head of state and head of government, and depends for his tenure on the confidence of Parliament. The executive, legislature and judiciary are all subject to the supremacy of the Constitution, and the superior courts have the power to strike down executive actions and acts of Parliament if they are unconstitutional.

The National Assembly, the lower house of Parliament, consists of 400 members and is elected every five years by a system of party-list proportional representation. The National Council of Provinces, the upper house, consists of ninety members, with each of the nine provincial legislatures electing ten members.

After each parliamentary election, the National Assembly elects one of its members as President; hence the President serves a term of office the same as that of the Assembly, normally five years. No President may serve more than two terms in office. The President appoints a Deputy President and Ministers, who form the Cabinet. The President and the Cabinet may be removed by the National Assembly by a motion of no confidence.

South Africa has three capital cities: Cape Town, as the seat of Parliament, is the legislative capital; Pretoria, as the seat of the President and Cabinet, is the administrative capital; and Bloemfontein, as the seat of the Supreme Court of Appeal, is the judicial capital.

In 2008, South Africa placed 5th out of 48 sub-Saharan African countries on the Ibrahim Index of African Governance. South Africa scored well in the categories of Rule of Law, Transparency & Corruption and Participation & Human Rights, but was let down by its relatively poor performance in Safety & Security.

South African Agriculture

The agricultural industry contributes around 5,5% of formal employment, relatively low compared to other parts of Africa, as well as providing work for casual labourers and contributing to around 2.4% of GDP for the nation. However, due to the aridity of the land, only 13,5% can be used for crop production, and only 3% is considered high potential land. The sector continues to face problems, with increased foreign competition and crime being two of the major challenges for the industry.

Maize production contributes 46% of the gross value of South Africa's field crops.

In the first quarter of 2010, the agricultural sector earned export revenues for R10.1 billion and used R8.4 billion to pay for imported agricultural products, therefore earning a positive trade balance of R1.7 billion.

The most important agricultural exports of South Africa include: edible fruit and nuts, beverages, preserved food, tobacco, cereals, wool not carded or combed, miscellaneous food, sugar, meat, milling products, malt and starch. These products accounted to over 80% of agricultural export revenue in the first quarter of 2010. The most important agricultural imports, accounting for over 60% of agricultural import value over the same period were cereals, meat, soya-bean oil cake, beverages, soya-bean oil and its fractions, tobacco, palm oil and its fractions, miscellaneous food, spices, coffee, tea, and preserved food. Overall, as a proportion of both total agricultural imports and exports, animals and animal products are relatively small contributors, with the exception of poultry imports.

Geographic features

Agro-ecological zones	Rainfall (mm/year) – see annual rainfall map
Highveld	approx 800 mm/yr
Lowveld	approx 800 mm/yr
Bushveld	approx 500 mm/yr
Karoo	approx 300 mm/yr

Topography	Km²	%
Total area	1,221,037	
Agricultural land	993,780	81
Pastures (veld) *	778,221	64
Arable land	145,000	12
Forest	92,030	7
Wetlands	4,800	4
Conservation areas	75,000	6

http://www.tradingeconomics.com
http://www.info.gov.za/aboutsa/environment.htm

(*) arid savanna, arid grassland, nama-karoo, succulent karoo, and thicket

Demographic data

Human population		Livestock households/farms	
Total number	48,502,063	Total number of households (h/h)	9,059,571
Average density / km²	41.4	Number of commercial farm h/h	45,818
% of urban	60.7	Number of communal farm h/h	1,292,600
% of rural	39.3	Estimate of livestock-owning h/h	850,000

http://www.tradingeconomics.com; http://www.statssa.gov.za; http://www.daff.gov.za; http://www.ru.ac.za

Current livestock census data

Animals species	Total Number	Specific numbers	
Cattle	13,688,328	Dairy animals	1,279,241
		Beef or dual purpose animals	2,907,000
Sheep	24,302,776		5,199,000
Goats	6,165,051		686,000
Pigs	1,583,574		2,614,000
Horses	300,000		
Donkeys	150,500		
Mules	14,300		
Poultry	160,000,000	Day-old pullet placement (layers)	25,630,000
		Layers	24,160,000
		Day-old parent pullets (broiler)	9,300,000
		Broiler breeder hens	6,520,000
		Broiler chick production	1,036,000,000
Ducks	380,000		
Turkeys	520,000		
Geese and guinea fowls	137,000		
Beehives	65,000		

(*) Number of slaughtered animals (unless mentioned otherwise)
2011 data DAFF I 2011 data SAPA I 2010 data FAOSTAT

Animal and animal product trade data

Animals and animal products	Average annual import		Average annual export	
	Quantity (2011)	Value (2011)	Quantity (2011)	Value (2011)
Live animals		R 256,990,219		R 252,356,524
• Cattle	100,000 h (2009)		80,000 h (2009)	
Meat & edible offal		R 3,988,910,750		R 477,917,831
• Beef/veal	19,000 MT		12,000 MT	
• Pork	42,000 MT		2,000 MT	
Poultry products		R 3,203,000,000		
• Broiler meat	326,000 MT		8,000 MT	
• Turkey meat	29,000 MT		0 MT	
TOTAL		**R 4,245,900,969**		**R 730,274,255**
Estimate in Euro		**€ 424,590,000**		**€ 73,027,000**

http://www.indexmundi.com

Economic data (2011 estimates)

National GDP	R 3,264 billion
	€ 326 billion
National budget	R 889 billion
	€ 89 billion
Budget deficit (as percentage of the GDP)	4.8 %
Agricultural GDP	R 70 billion
	€ 7 billion
	2.2 %
Livestock GDP (as compared to Agricultural GDP)	49.0 %
Livestock GDP (as compared to National GDP)	1.1 %
Annual public sector contribution to agriculture (DAFF budget only)	R 4.72 billion
	€ 0.47 billion
Annual public sector contribution to agriculture (as a percentage of the national budget)	0.5 %
Annual budget of the Veterinary Services (DAFF / DAH budget only)	not available
Annual budget of the Veterinary Services (as a percentage of the DAFF budget)	not available

http://data.worldbank.org/country/south-africa; http://www.info.gov.za/aboutsa/agriculture.htm
http://www.tradingeconomics.com; http://www.cer.org.za

II.3 Context of the evaluation

II.3.A Availability of data relevant to the evaluation

A list of documents received by the Team before and during the PVS Evaluation mission is provided in Appendix 6.

All documents listed in Appendix 6 are referenced to the relevant critical competencies to support the level of advancement achieved.

The following table provides an overview of the availability of the main categories of documents or data needed for the evaluation, taking into account the information requirements set out in the OIE Terrestrial Animal Health Code.

Table 3: Summary of data available for evaluation

Main document categories	Data available in the public domain	Data accessible only on site or on request	Data not available
→ **Animal census:**			
○ at 1st administrative level	x		
○ at 2nd administrative level	x		
○ at 3rd administrative level			x
○ per animal species	x		
○ per production systems			x
→ **Organisations charts**			
○ Central level of the VS		x	
○ 2nd level of the VS		x	
○ 3rd level of the VS		x	
→ **Job descriptions in the VS**			
○ Central levels of the VS		x	
○ 2nd level of the VS		x	
○ 3rd level of the VS		x	
→ **Legislations, regulations, decrees …**			
○ Animal health and public health	x		
○ Veterinary practice	x		
○ Veterinary statutory body	x		

○ Veterinary medicines and biologicals		x	
○ Official delegation			x
→ **Veterinary census**			
○ Global (public, private, veterinary, para-professional)		x	
○ Per level		x	
○ Per function		x	
→ **Census of logistics / infrastructures**		x	
→ **Activity reports**		x	
→ **Financial reports**		x	
→ **Animal health status reports**	x		
→ **Evaluation reports**			
→ **Procedures, registers, records, etc**		x	

II.3.B General organisation of the Veterinary Services

The South African Veterinary Services (VS) comprises a decentralised system with a national VS and 9 separate provincial VS. Legislatively, animal health is controlled through the Animal Diseases Act that specifies concurrent national and provincial legislative competence. Coordination is carried out through an Implementation Protocol as agreed to by the relevant Directors of VS nationally and in each jurisdiction - this aims to differentiate animal health responsibilities. More detailed, ongoing coordination is through an inter-governmental MinTECH Veterinary Working Group which reports to higher committees comprising the Agricultural Heads of Departments and Ministers. The Veterinary Working Group (Directors of VS) is supported by further specialised intergovernmental sub-groups such as those relating to veterinary laboratory services and veterinary epidemiology.

The National VS sit within the Agricultural Production, Health and Food Safety Branch of the Department of Agriculture, Forestry and Fisheries (DAFF) in Pretoria. The functions of the VS according to OIE guidelines lie within two different Chief Directorate - “Inspection and Quarantine Services” and “Animal Production and Health”.

The Chief Directorate for Inspection and Quarantine Services is divided into four directorates - Inspection Services, Food Safety and Quality Assurance, Agriculture Production Inputs Control and Food Import and Export Standards. This Chief Directorate deals with all agricultural products including animals. Border inspection and quarantine is in the Inspection Services Directorate. Certification of exports and import permits is in the Directorate for Food Import and Export Standards. The control of over the counter veterinary medicines (Act 36) is in the Agriculture Inputs Control Directorate (for schedule medicines are under control of the DoH; Act 101).

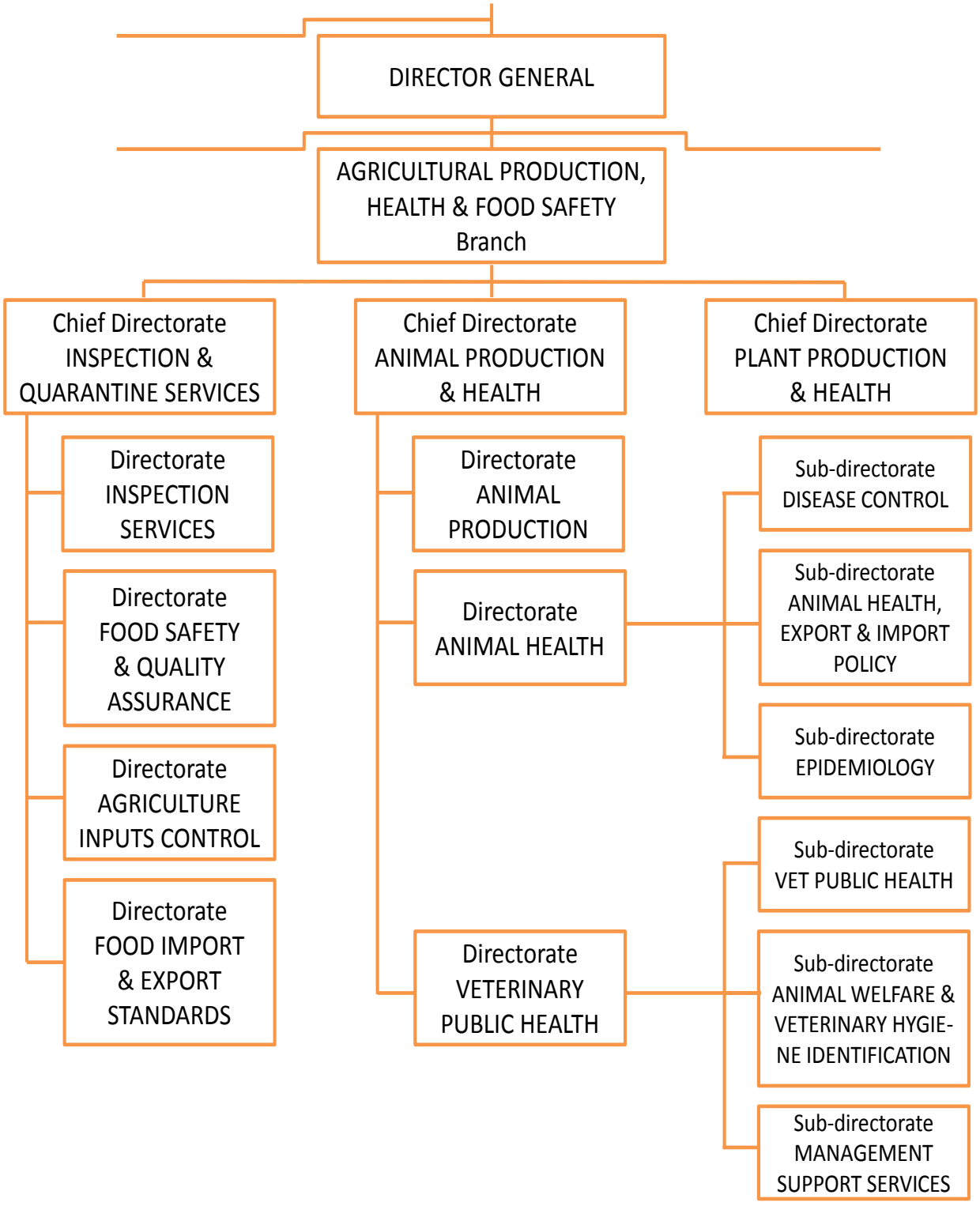
The Animal Production and Health Chief Directorate is divided into Animal Production, Veterinary Public Health and Animal Health Directorates.

The Animal Health Directorate comprises sub-directorates of Epidemiology, Disease Control, and Import and Export Policy.

The Veterinary Public Health Directorate comprises sub-directorates of Veterinary Public Health, Animal Welfare, Hygiene and Identification, and Management Support Services.

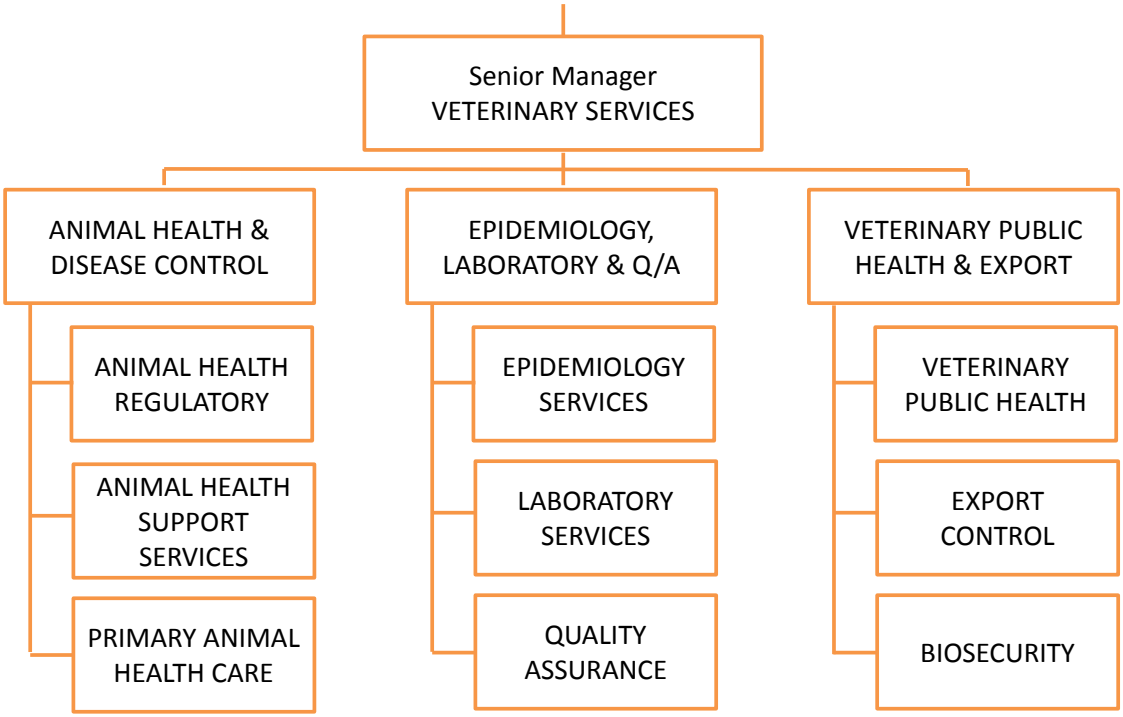
The National VS set national policy/protocols/guidelines and finance additional non-routine national programmes (such as relating to AI and pig diseases active surveillance, and FMD active surveillance and vaccination) delivered via the provinces. They are expected to provide leadership and additional funding for controlling disease outbreak responses of national significance. They are also responsible for the sanitary regulation of international trade in animals and animal

products (including international border inspections and import health certification), providing field animal health services for the Kruger National Park and along relevant international borders, (e.g. fence maintenance and monitoring), and providing laboratory approvals for official diagnosis.



Structures within the provincial VS are variable but typically comprise separate animal health, veterinary public health (or specialised services) and clinical services functions. The provincial VS are responsible for policy, funding and implementation of routine field animal health activities; including dip-tank and auction inspections, vaccination (non-FMD) and awareness campaigns, clinical services in communal areas, routine disease investigations and testing (e.g. bovine tuberculosis and brucellosis), the issuing of livestock movement permits (including co-signed export certification), and auditing meat hygiene/inspection and compartmentalisation in the commercial sector. A few provinces (Limpopo, Free State, Kwazulu Natal and being piloted in Mpumalanga) have a so-called "matrix" structure which allocates field animal health services to the authority of generic district and/or municipality agricultural authorities.

Generic organogram of provincial VS could be synthesized as below:



Each provincial VS supervises some State Veterinary Offices (around 95 in total) and each State Veterinary Office supervises some AHT sub-offices (around 300 in total).

Currently, because of the break in the chain of command, the VS are not able to provide a clear description of the distribution of their physical resources and their financial resources; however the VS are able to provide this distribution for their human resources.

Veterinary Services staffing comprises registered veterinarians at national, provincial, and district levels. At state (municipality) levels, typically one or two state veterinarians working in a state offices will supervise a control (head) animal health technician, who in turn manages a team of animal health technicians who deliver field activities, some from small satellite offices. In veterinary public health, monthly meat inspection audits are conducted by dedicated veterinary para-professionals (chief meat inspectors) and/or animal health technician staff at provincial level. Meat inspectors permanently working within abattoirs are most commonly employed by external private companies (e.g., IMQAS) or directly by the facility owner. Private veterinarians primarily service the commercial livestock sector and have limited official functions apart from passive surveillance, sampling relating to movement permits, and delivering compulsory rabies vaccination for pets. There are relatively few veterinarians working in veterinary laboratories, which are staffed by a further category of veterinary technologists.

In South Africa, all veterinarians, animal health technicians and veterinary technologists are registered through examination by the South African Veterinary Council; meat inspectors are registered through a Human Health Professions Council.

The Ondersterpoort Veterinary Institute (OVI) is the national reference laboratory. It lies outside the VS structure under the para-statal, Agricultural Research Council, with DAFF providing annual funding and approvals for official diagnostic functions. OVI is supported in official diagnostic functions by several DAFF approved private (e.g. Deltammune, IDEXX) and university laboratories, to which testing can be outsourced. Provincial laboratories undertake relevant diagnostic functions tailored to provincial priorities and programmes such as for bovine tuberculosis and brucellosis surveillance, and suspect controlled/notifiable disease post-mortems. Satellite laboratories from provincial laboratories provide basic diagnostic services.

The provision of veterinary clinical services in South Africa is undertaken via a dual system. Private veterinarians service the commercial sector with little government interaction and state animal health technicians provide limited services to the emerging or communal sector. The policy for funding clinical medicines and vaccines for the emerging or communal sector varies between provinces with a combination of fully funded, means tested or 'advice only' policies in place. VS coverage of communal areas, especially outside the FMD protection zone, is limited. A new policy of one year government salaried compulsory community service by new veterinary graduates is due to start in 2014, funded by the national VS. Exactly how this will be undertaken is yet to be determined – there are some reports that the focus for the recruits will be only on communal clinical services and whilst others report that these recruits will also work on regulatory functions.

The regulation of veterinary medicines in South Africa is shared between the human and animal health authorities. 'Over-the-counter' veterinary medicines (remedies) are regulated by the national VS under Act 36; scheduled medicines are regulated by the human health authorities under Act 101. Currently 'over-the-counter' medicines under Act 36 include several vaccines and antibiotics (e.g. tetracyclines and sulphonamides), which are freely available, animal unseen, to anyone from retail pharmacies and agricultural 'co-ops'. For the communal or emerging livestock sector, animal health technicians may or may not provide advice relating to the use of these medicines.

Stakeholder communication and consultation with the national VS is facilitated by a newly formed Animal Health Forum which comprises the major livestock and veterinary stakeholder groups at national level. Stakeholder communication and consultation at provincial and field levels is variable, but generally is informal only.

II.3.C Animal disease occurrence

Information on animal disease occurrence from the OIE website (see table 4)

Table 4: Disease status of the country - Reporting Period – 2011

› Diseases present in the Country

	Domestic		Wild		
Disease	Notifiable	Status	Notifiable	Status	Note
African horse sickness	✓	Clinical Disease	✓	Confirmed infection (no clinical disease)	
African swine fever	✓	Clinical Disease	✓	Confirmed infection (no clinical disease)	
American foulbrood of honey bees	✗	Suspected (not confirmed)			
Anthrax	✓	Clinical Disease	✓	Clinical Disease	
Avian chlamydiosis	✗	Clinical Disease	✗	No information	
Avian infectious bronchitis	✗	Clinical Disease	✗	No information	
Bluetongue	✓	Clinical Disease	✓	Clinical Disease	
Bov. genital campylobacteriosis	✗	Clinical Disease	✗	No information	
Bovine anaplasmosis	✗	Clinical Disease	✗	No information	
Bovine babesiosis	✗	Clinical Disease	✗	Clinical Disease	
Bovine tuberculosis	✓	Clinical Disease	✓	Clinical Disease	
Bovine viral diarrhoea	✗	Clinical Disease	✗	No information	
Brucellosis (Brucella abortus)	✓	Clinical Disease	✓	Clinical Disease	
Contagious equine metritis	✓	Clinical Disease	✓	Not reported for this Period (since Unknown)	
Crimean Congo haemorrhagic fever	✗	No information	✗	Confirmed infection (no clinical disease)	
Dourine	✓	Clinical Disease	✗	Not reported for this Period (since Unknown)	
Echinococcosis/hydatidosis	✗	Not reported for this Period (since 2004)	✗	Confirmed infection (no clinical disease)	
Enzootic abortion (chlamydiosis)	✗	Clinical Disease	✗	No information	
Enzootic bovine leukosis	✗	Clinical Disease	✗	No information	
Epizootic ulcerative syndrome	✗	No information	✗	Clinical Disease	
Equine piroplasmosis	✗	Clinical Disease	✗	Confirmed infection (no clinical disease)	
Equine rhinopneumonitis	✗	Clinical Disease	✗	No information	
Foot and mouth disease	✓	Clinical Disease	✓	Clinical Disease	
Haemorrhagic septicaemia	✗	Clinical Disease	✗	No information	
Heartwater	✗	Clinical Disease	✗	No information	
Highly path. avian influenza	✓	Clinical Disease	✓	Not reported for this Period (since 200607)	
Inf.bov.rhinotracheit. (IBR/IPV)	✗	Clinical Disease	✗	No information	
Lumpy skin disease	✓	Clinical Disease	✗	No information	
Newcastle disease	✓	Clinical Disease	✓	Not reported for this Period (since 2009)	
O. w. screwworm (C. bezziana)	✗	Clinical Disease	✗	No information	
Ovine epididymitis (B. ovis)	✓	Clinical Disease	✗	No information	
Paratuberculosis	✓	Clinical Disease	✗	No information	
Pullorum disease	✗	Not reported for this Period (since 200510)	✗	Confirmed infection (no clinical disease)	
Rabies	✓	Clinical Disease	✓	Clinical Disease	
Rift Valley fever	✓	Clinical Disease	✓	Clinical Disease	
Trichomonosis	✗	Clinical Disease	✗	Not reported for this Period (since 1993)	
Trypanosomosis	✓	Not reported for this Period (since 201004)	✓	Confirmed infection (no clinical disease)	

› Diseases never reported

Disease	Notifiable	Type of surveillance	Note
Acarapisosis of honey bees	✓	General Surveillance	
Aujeszky's disease	✓	General Surveillance	
Bovine spongiform encephalopathy	✓	General Surveillance	
Brucellosis (Brucella suis)	✓	General Surveillance	
Camelpox	✗		
Caprine arthritis/encephalitis	✓	General Surveillance	
Contagious agalactia	✓	General Surveillance	
Contagious cap. pleuropneumonia	✓	General Surveillance	
Crayfish plague (Aphanomyces astaci)	✓	General Surveillance	
Duck virus hepatitis	✓	General Surveillance	
Encephalomyelitis (West.)	✓	General Surveillance	
Epizoot. haematopoietic necrosis	✓	General Surveillance	
Epizootic haemorrhagic disease	✓		
Equine encephalomyelitis (Eastern)	✓	General Surveillance	
Gyrodactylosis (Gyrodactylus salaris)	✓	General Surveillance	
Infect. haematopoietic necrosis	✓	General Surveillance	
Infection with abalone herpes-like virus	✓		
Infection with Bonamia exitiosa	✓	General Surveillance	
Infection with Bonamia ostreae	✓	General Surveillance	
Infection with Marteilia refringens	✓	General Surveillance	

Infection with Perkinsus marinus	✓	General Surveillance	
Infection with Perkinsus olseni	✓	General Surveillance	
Infection with ranavirus	✓		
Infection with Xenohaliotis californiensis	✓	General Surveillance	
Infectious hypodermal and haematopoietic necrosis	✓	General Surveillance	
Infectious myonecrosis	✓		
Infectious salmon anaemia	✓	General Surveillance	
Japanese encephalitis	✓	General Surveillance	
Koi herpesvirus disease	✓	General Surveillance	
Myxomatosis	✓	General Surveillance	
N. w. screwworm (C. hominivorax)	✓	General Surveillance	
Nairobi sheep disease	✓	General Surveillance	
Necrotising hepatopancreatitis	✓		
Nipah virus encephalitis	✗	General Surveillance	
Peste des petits ruminants	✓	General Surveillance	
Rabbit haemorrhagic disease	✓	General Surveillance	
Red sea bream iridoviral disease	✓	General Surveillance	
Salmonellosis (S. abortusovis)	✓	General Surveillance	
Sheep pox and goat pox	✓	General Surveillance	
Spherical baculovirosis (Penaeus monodon-type baculovirus)	✗		
Spring viraemia of carp	✓	General Surveillance	
Surra (Trypanosoma evansi)	✓	General Surveillance	
Swine vesicular disease	✓	General Surveillance	
Taura syndrome	✓	General Surveillance	
Tetrahedral baculovirosis (Baculovirus penaei)	✗		
Transmissible gastroenteritis	✓	General Surveillance	
Tropilaelaps infestation of honey bees	✓	General Surveillance	
Tularemia	✓	General Surveillance	
Venezuelan equ.encephalomyelitis	✓	General Surveillance	
Vesicular stomatitis	✓	General Surveillance	
Viral haemorrhagic septicaemia	✓	General Surveillance	
White spot disease	✓	General Surveillance	
White tail disease	✓	General Surveillance	
Yellow head disease	✓	General Surveillance	

› Diseases not reported in 2011

	Domestic				Wild			
Disease	Notifiable	Last occurrence	Surveillance	Note	Notifiable	Last occurrence	Surveillance	Note
Avian infect. laryngotracheitis	✗	04/2008	General Surveillance		✗	Unknown		
Brucellosis (Brucella melitensis)	✓	10/2010	General Surveillance		✓	06/2007	General Surveillance	
Classical swine fever	✓	08/2007	General and targeted surveillance		✓	08/2007	General and targeted surveillance	
Contagious bov. pleuropneumonia	✓	1924	General Surveillance		✓	1924	General Surveillance	
Contagious equine metritis	✓	Unknown			✓	Unknown	General and targeted surveillance	
Dourine	✓	Unknown			✗	Unknown	General Surveillance	
Echinococcosis/hydatidosis	✗	2004	General Surveillance		✗	12/2010		
Equine infectious anaemia	✓	1955	General Surveillance		✓	1955	General Surveillance	
Equine influenza	✓	12/2003	General Surveillance		✓	12/2003	General Surveillance	
Equine viral arteritis	✓	09/2001	General Surveillance		✓	09/2001	General Surveillance	
Fowl cholera	✗	09/2010			✗	Unknown		
Fowl typhoid	✗	03/2010	General Surveillance		✗	Unknown		
Glanders	✓	1945	General Surveillance		✓	1945	General Surveillance	
Highly path. avian influenza	✓	Unknown			✓	07/2006	General and targeted surveillance	
Infec bursal disease (Gumboro)	✗	09/2009	General Surveillance		✗	Unknown		
Infection with Batrachochytrium dendrobatidis	✗	Unknown			✗	Unknown		
Leptospirosis	✗	06/2009	General Surveillance		✗	Unknown		
Low pathogenic avian influenza (poultry)	✓	2007	General Surveillance					
Maedi-visna	✓	05/1997	General Surveillance		✓	05/1997	General Surveillance	
Marek's disease	✗	07/2010			✗	Unknown		
Mycoplasmosis (M. gallisepticum)	✗	10/2005	General Surveillance		✗	Unknown		
Newcastle disease	✓	Unknown			✓	2009	General Surveillance	
Porcine cysticercosis	✗	01/2010			✗	Unknown		
Porcine reproductive/respiratory syndr.	✓	04/2008	General Surveillance		✓	04/2008	General Surveillance	
Pullorum disease	✗	10/2005	General Surveillance		✗	Unknown		
Q fever	✓	2009	General Surveillance		✗	Unknown	General Surveillance	
Rinderpest	✓	1904	General Surveillance		✓	1904	General Surveillance	
Scrapie	✓	1972	General Surveillance		✓	1972	General Surveillance	
Theileriosis	✓	09/2006	General Surveillance		✓	09/2006	General Surveillance	
Trichinellosis	✗	12/2008	General Surveillance		✗	06/2010	General Surveillance	
Trichomonosis	✗	Unknown			✗	1993	General Surveillance	
Trypanosomosis	✓	04/2010	General Surveillance		✓	04/2010		
West Nile Fever	✗	12/2010			✗	Unknown		

› Diseases for which no Information has been provided.

Disease
Avian chlamydiosis - (Wild)
Avian infect. laryngotracheitis - (Wild)
Avian infectious bronchitis - (Wild)
Avian mycoplasmosis (M.synoviae) - (Domestic)
Avian mycoplasmosis (M.synoviae) - (Wild)
Bov. genital campylobacteriosis - (Wild)
Bovine anaplasmosis - (Wild)
Bovine viral diarrhoea - (Wild)
Crimean Congo haemorrhagic fever - (Domestic)
Enzootic abortion (chlamydiosis) - (Wild)
Enzootic bovine leukosis - (Wild)
Epizootic ulcerative syndrome - (Domestic)
Equine rhinopneumonitis - (Wild)
European foulbrood of honey bees - (Domestic)
Fowl cholera - (Wild)
Fowl typhoid - (Wild)
Haemorrhagic septicaemia - (Wild)
Heartwater - (Wild)
Inf.bov.rhinotracheit. (IBR/IPV) - (Wild)
Infec bursal disease (Gumboro) - (Wild)
Leishmaniosis - (Domestic)
Leishmaniosis - (Wild)
Leptospirosis - (Wild)
Lumpy skin disease - (Wild)
Marek's disease - (Wild)
Mycoplasmosis (M. gallisepticum) - (Wild)
O. w. screwworm (C. bezziana) - (Wild)
Ovine epididymitis (B. ovis) - (Wild)
Paratuberculosis - (Wild)
Porcine cysticercosis - (Wild)
Small hive beetle infestation - (Domestic)
Turkey rhinotracheitis - (Domestic)
Varroosis of honey bees - (Domestic)

Source : WAHID (oie) retrieved on October 15th, 2012

II.4 Organisation of the evaluation

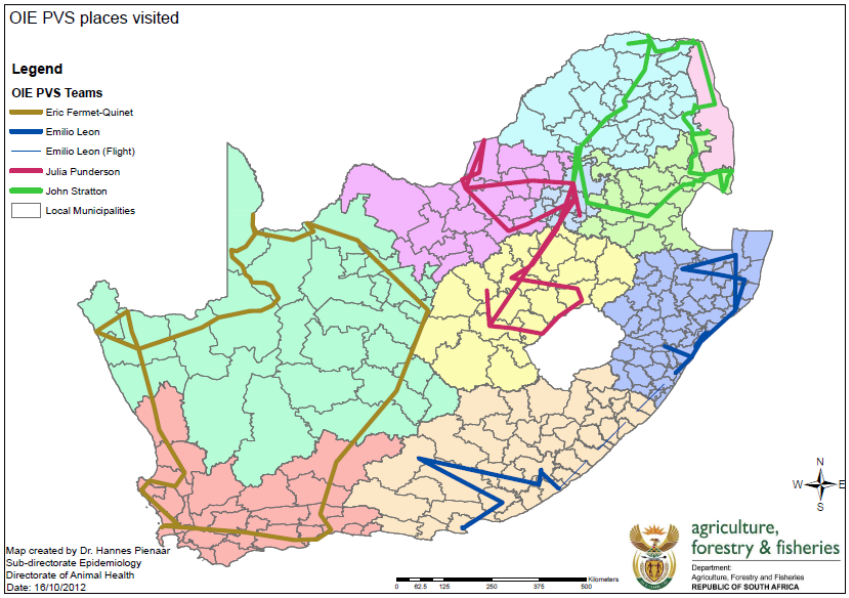
II.4.A Timetable of the mission

Appendix 3 provides a list of persons met; Appendix 4 provides the timetable of the mission and details of the facilities and locations visited by the OIE-PVS Team. Appendix 5 provides the international air travel itinerary of the team members.

The mission started with three days of meetings at central level with the different directorates and sub-directorates as well as with the main stakeholder representatives, and the VSB, OVI and OVF. It also included field visits in Gauteng Province VS for all experts to develop a common understanding of this level.

Then the OIE mission split into four teams, each including one OIE expert and two officials delegated by DAFF. The field mission lasted around 10 days and visited all provinces, interviewing around 500 persons and amounting to a total of 10,000 kilometres in addition to internal flights (from Johannesburg to Kimberly, Bloemfontein, Port Elisabeth, from East London to Durban, and from Richards Bay to Johannesburg).

The map below indicates the travel undertaken by the assessors.



II.4.B Categories of sites and sampling for the evaluation

Table 5 lists the categories of site relevant for the evaluation and the number of each category of site in the country. The table indicates how many of the sites were visited, in comparison with the "ideal" sampling framework as recommended in the OIE PVS Manual.

Appendix 4 provides a detailed list of sites visited and meetings conducted.

Taking into account the diversity of the country and the high number of sites in the country, all 9 provinces were visited representing all agro-ecological zones.

Provincial veterinary office, provincial laboratories and zoning (AHS, ASF and FMD) were systematically visited.

State/District offices were extensively visited, as well as borders. Compared with the ideal too few AHT sub-offices were visited, although AHTs were met during meetings at State/District Veterinary offices.

Owing to time constraints, only a small sample of slaughter facilities, private veterinarians, agriculture shops and human pharmacies could be visited, despite their importance; this was regarded as acceptable as the categories of facilities were apparently homogeneous with similar infrastructures and processes.

Most of the national stakeholder organisations were met, as well as several local organisations. Some field visits were made in different types of farms, although the sampling is not supposed to be representative for the purpose of this mission.

It was not possible to visit any compartments (pig or poultry) and to meet with consumers' organisations.

Taking into account the homogeneity of most categories of sites, the sampling was reasonable. Although some doubt may arise about the representativeness of some of the smaller samples, this general representativeness was confirmed by discussions with the national teams and meetings.

Table 5: Site sampling	Terminology or names used in the country	Number of sites	"Ideal" sampling	Actual sampling
GEOGRAPHICAL ZONES OF THE COUNTRY				
Climatic zone	*Highveld, Lowveld, Bushveld, Karoo*	4	4	4
Topographical zone	*See table 2 : topography*	4	4	4
Agro-ecological zone	*See map of agricultural regions*	10	10	10
ADMINISTRATIVE ORGANISATION OF THE COUNTRY				
1st administrative level	*2 CD, 6 Directorates, 6 Sub-D*	14	10	14
2nd administrative level	*Provincial*	9	9	9
3rd administrative level	*District*	52	10	± 20
4th administrative level	*Municipality*	241	15	± 60
VETERINARY SERVICES ORGANISATION AND STRUCTURE				
Central (Federal/National) VS	National	1	1	1
Internal division of the central VS	2 chief D, 6 Directorates, 6 subD	14	10	11
1st level of the VS	Provincial Department	9	9	9
2nd level of the VS	District & State Vet Offices (variable)	± 100	10	35
Veterinary organisations (VSB, unions…)	SAVC, SAVA	2	2	2
FIELD ANIMAL HEALTH NETWORK				
Field level of the VS (animal health)	AH technician sub-offices	± 300	17	4
Private veterinary sector	Private field vet practices	350	19	17
Other sites (dip tanks, crush pens, etc.)	Diptanks	?		3
VETERINARY MEDICINES & BIOLOGICALS				
Production sector	OBP + 2 private	± 3	3	2
Import and wholesale sector		?		
Retail sector	Rural private vet practices Pharmacists Farmers cooperatives	± 350 800	37 ? 28	17 2 7
VETERINARY LABORATORIES				
National laboratories	OVI	1	1	1
Regional and local laboratories	Provincial Laboratories	18	10	13
Associated, accredited and other labs	Approved private laboratories	15	10	3
ANIMAL AND ANIMAL PRODUCTS MOVEMENT CONTROL				
Bordering countries	Lesotho, Swaziland, Mozambique, Zimbabwe, Botswana, Namibia	6	6	6
Airports and sea ports BIP	4/12 airports, 4/7 seaports	8	8	6
Terrestrial border BIP		16	10	6
Other terrestrial border posts not BIP		48		2
Quarantine stations for import	Government	2	2	2
Internal check points	Zoning	?		2
Live animal markets	Auctions	?		3
Zoning : FMD, ASF & AHS Compartmentalisation : pigs, poultry & ostriches Private export quarantine		3 ? 45	3 10	3 0 1
PUBLIC HEALTH INSPECTION OF ANIMALS AND ANIMAL PRODUCTS				
National market slaughterhouses	High thru-put Low thru-put	185 394	14 20	8 5
Local market slaughterhouse	Rural	138	11	3
Processing sites (milk, meat, eggs, etc)	Meat Milk Taxidermy	? ? ?		1 2 1
Retail outlets (butchers, shops, restaurants)		?		3
TRAINING AND RESEARCH ORGANISATIONS				
Veterinary university	Onderstepoort Vet Faculty	1	1	1
Veterinary paraprofessional schools	Please refer to C.C. I.2.B.	4	4	0
Veterinary research organisations	OVI, OBP, 2 Wildlife, 2 pharm.lab	6	6	4
STAKEHOLDERS' ORGANISATIONS				
Agricultural Chamber / organisation	Agri-SA	1	1	1
National stakeholders organisations	Please refer to C.C. III.2.	14	10	12
Local livestock farmers organisations	Commercial, Game, Emerging	?	?	± 20
Consumer organisations	SA National Consumers Union Consumer Goods Council of SA	2	2	0

PART III: RESULTS OF THE EVALUATION & GENERAL RECOMMENDATIONS

This evaluation identifies the strengths and weaknesses of the veterinary services, and makes general recommendations.

FUNDAMENTAL COMPONENTS

1.	**HUMAN PHYSICAL AND FINANCIAL RESOURCES**
2.	**TECHNICAL AUTHORITY AND CAPABILITY**
3	**INTERACTION WITH INTERESTED PARTIES**
4.	**ACCESS TO MARKETS**

Veterinary services are recognised by the international community and by OIE Members as a '**global public good**'. Accordingly, it is essential that each country acknowledges the importance of the role and responsibilities of its veterinary services and gives them the human and financial resources needed to fulfil their responsibilities.

This OIE PVS Evaluation examined each critical competency under the 4 fundamental components, listed strengths and gaps where applicable, and established a current level of advancement for each critical competency. Evidence supporting this level is listed in Appendix 6. General recommendations were provided where relevant.

The current level of advancement for each critical competency is shown in cells shadowed in grey **and bold fonts** in the table.

III.1 Fundamental component I: human, physical and financial resources

This component of the evaluation concerns the institutional and financial sustainability of the VS as evidenced by the level of professional/technical and financial resources available and the capacity to mobilize these resources. It comprises 14 critical competencies:

Critical competencies:

Section I-1	**Professional and technical staffing of the Veterinary Services**
	A. Veterinary and other professionals (university qualification)
	B. Veterinary para-professionals and other technical personnel
Section I-2	**Competencies of veterinarians and veterinary para-professionals**
	A. Professional competencies of veterinarians
	B. Competencies of veterinary para-professionals
Section I-3	**Continuing education**
Section I-4	**Technical independence**
Section I-5	**Stability of structures and sustainability of policies**
Section I-6	**Coordination capability of the VS**
	A. Internal coordination (chain of command)
	B. External coordination
Section I-7	**Physical resources**
Section I-8	**Operational funding**
Section I-9	**Emergency funding**
Section I-10	**Capital investment**
Section I-11	**Management of resources and operations**

Terrestrial Code References:

Points 1-7, 9 and 14 of Article 3.1.2. on Fundamental principles of quality: Professional judgement / Independence / Impartiality / Integrity / Objectivity / Veterinary legislation / General organisation / Procedures and standards / Human and financial resources.

Point 4 of Article 3.2.1. on General considerations.

Point 1 of Article 3.2.2. on Scope.

Points 1 and 2 of Article 3.2.3. on Evaluation criteria for the organisational structure of the Veterinary Services.

Point 2 of Article 3.2.4. on Evaluation criteria for quality system: "Where the Veterinary Services undergoing evaluation… than on the resource and infrastructural components of the services".

Article 3.2.5. on Evaluation criteria for human resources.

Points 1-3 of Article 3.2.6. on Evaluation criteria for material resources: Financial / Administrative / Technical.

Points 3 and Sub-point d) of Point 4 of Article 3.2.10. on Performance assessment and audit programmes: Compliance / In-Service training and development programme for staff.

Article 3.2.12. on Evaluation of the veterinary statutory body.

Points 1-5 and 9 of Article 3.2.14. on Organisation and structure of Veterinary Services / National information on human resources / Financial management information / Administration details / Laboratory services / Performance assessment and audit programmes.

I-1 Professional and technical staffing of the Veterinary Services *The appropriate staffing of the VS to allow for veterinary and technical functions to be undertaken efficiently and effectively.* A. Veterinary and other professionals (university qualification)	Levels of advancement
	1. The majority of veterinary and other professional positions are not occupied by appropriately qualified personnel.
	2. The majority of veterinary and other professional positions are occupied by appropriately qualified personnel at central and state / provincial levels.
	3. The majority of veterinary and other professional positions are occupied by appropriately qualified personnel at local (field) levels.
	4. There is a systematic approach to defining job descriptions and formal appointment procedures for veterinarians and other professionals.
	5. There are effective management procedures for performance assessment of veterinarians and other professionals.

Terrestrial Code reference(s): Annexe 1

Evidence *(Appendix 6):* H17, H21-22, H24, H58, H64, H70, H104, H138-140, H170, H187, H191, H195, H197, P140-155, P266, P273, P356

Findings:

The VS currently employ around 250 veterinarians in the public sector distributed through 9 provincial offices and approximately 100 state/district veterinary offices with about 850 private vets (out of 2200 total veterinarians in the country) working in some 350 mixed rural practices.

For AH in the public sector, there are some limitations in veterinary staffing, especially at central level. The main limitations are in the private sector with a lack of private veterinarians in Limpopo, NW, NC and FS. The ratios of veterinarians per km^2 and per VLU vary widely depending on the province geography and animal production density and systems. In some areas the nearest veterinarian is 300 km or more away; the extremely low density of animals and the climate do not favour infectious diseases in these areas.

The VS and the VSB are currently supporting a scheme to implement compulsory community service (CCS) for 1 year following graduation for all students in order to tackle the lack of veterinarians in some geographical areas and domains (e.g. small farmers, extension, etc).

Delivery of clinical services (including distribution of veterinary medicines) is usually provided by private veterinarians; the public sector provides variable services especially in remote areas and small holders – varying from some disease control activities to completely subsidized delivery of medicines and vaccines.

For VPH, the ratio of veterinarians compared with the number of facilities is low with little involvement in direct inspection [see CC II.8.B and C].

In the public sector, every veterinarian has a job description with annual and biannual review with the development of work-plans. There are detailed job descriptions with defined responsibilities and qualifications. Performance assessments include requirements for CPD, and performance assessment with bonus payments based on ratings of job performance in key areas.

In most provinces and at the national level, veterinarians are not considered to be a “scarce skill” despite the number of vacancies (estimated 10 to 20 %); this does limits the VS ability to recruit, maintain staff and fill posts by providing incentives for retention and competing with the remuneration levels of the private sector.

Strengths:

- Clear authority, responsibilities, distribution and management of veterinarians are defined.

Weaknesses:

- Lack of veterinarians in regular contact with animals and farmers, especially in the private sector in provinces with extensive animal production systems and with small farmers or livestock owners (see Art 235).
- Lack of veterinarians directly involved with on-site food safety inspection.
- A clear distinction of public and private good in the delivery of veterinary services is lacking.
- Lack of redeployment policy within the VS at national level or even at provincial level. - once recruited to a place for a specific job, it is difficult to move staff to some other place.
- Some provinces have a number of vacant posts in the VS; DAFF is understaffed.
- Appointment process is long with multiple delays; initial advertising of post may not progress, VS participates in the initial interview but has little input thereafter.

Recommendations

- Organize and support regular systematic contact between veterinarians and animals/farmers in the extensive productions systems and with the small farm/livestock owner sector to increase the network of veterinarians in the field.
- Increase direct involvement of veterinarians in on-site food safety inspection.
- Clearly establish regulations for cost recovery when the public service is delivering services which are largely for private good - these need to be clearly defined
- Use the CCS approach to promote settlement of private veterinarians in areas and domains identified as under-served in order to ensure access to the same quality and range of services nationally. Strong consideration should be given to placing new veterinarians undertaking community service with private veterinarians to provide a link to private veterinary practices in communal/emerging farming areas. CCS should not be used in such a way that it would create a double standard veterinary service delivery for specific areas/farmers.
- Develop a recruitment, retention and career-pathing process for the public sector (DAFF or province level) to enable the VS to ensure proactive “planning and control” rather than reactive ‘running after emergencies’ and patching up the deficiencies in the chain of command.

OIE Terrestrial Code Article 3.2.5. Evaluation criteria for human resources
the evaluation should provide assurances that disease monitoring is being conducted by a sufficient number of qualified, experienced field veterinarians who are directly involved in farm visits; there should not be an over-reliance on veterinary para-professionals for this task.

B. Veterinary para-professionals and other technical personnel	Levels of advancement
	1. The majority of technical positions are not occupied by personnel holding appropriate qualifications.
	2. The majority of technical positions at central and state / provincial levels are occupied by personnel holding appropriate qualifications.
	3. The majority of technical positions at local (field) levels are occupied by personnel holding appropriate qualifications.
	4. The majority of technical positions are effectively supervised on a regular basis.
	5. There are effective management procedures for formal appointment and performance assessment of veterinary para-professionals.

Terrestrial Code reference(s): Annexe 1

Evidence *(Appendix 6):* H17, H23, H25, H58, H64, H70, H104, H114, H138-140, H169-170, H187, H190, H195, H197, P140-155, P266, P273

Findings:

The public sector employs about 1500 veterinary para-professionals (currently there are some 350 vacant posts) who report and are effectively supervised by veterinarians. About 80% are AHTs involved in active and passive surveillance, early detection and disease control in the field. There are clear procedures of supervision backed by Veterinary Council regulations. They are distributed at about 100 state/district offices and around 300 AHT sub-offices.

There are approximately 100 veterinary para-professionals working in VPH doing regular surveys and auditing of facilities processing foods of animal origin including slaughterhouses.

In the public sector, every veterinary para-professional has a job description with annual and biannual review and development of work-plans. Detailed job descriptions include responsibilities and qualifications. Performance assessments include a requirement for CPD, and performance assessment linked to remuneration based on ratings of job performance, and key competencies.

Private companies employ hundreds of meat inspectors to provide on-site inspections services to all relevant facilities producing products of animal origin – registered by the VS at provincial level (the number is not collated at DAFF level).

Private rural practices do not usually employ veterinary para-professionals. Veterinary nurses are regularly employed in private practices (mainly pet practice) and are registered by SAVC.

Strengths:

- Clear procedures of supervision of all activities and of all categories of veterinary para-professionals in all sectors, public and private, are defined and implemented.

Weaknesses:

- In some provinces there is a lack of qualified, registered veterinary technologists in the provincial laboratory system due to the low number of annual graduates and competition from the private sector.
- Veterinarians generally provide no on-site or direct field supervision of veterinary para-professionals activities in the public sector.
- Apparent over reliance on veterinary para-professionals in all activities relevant to AH and VPH (article 3.2.5).
- Veterinary para-professionals working as meat inspectors for the private inspection services have a high turn-over. Although administratively registered by the provincial VS, their number is not collated by DAFF and they are not registered by SAVC and not directly supervised by veterinarians.

Recommendations:

- Investigate the need for direct supervision of veterinary para-professionals by veterinarians in relevant domains/activities/sites in order to ensure full compliance with OIE standards to reinforce credibility within the system.
- Collate data about meat inspectors at national level.
- Review the need for veterinary para-professionals, recuit and train staff as required (consider using a PVS gap analysis to identify the required staffing).

I-2 Competencies of veterinarians and veterinary para-professionals *The capability of the VS to efficiently carry out their veterinary and technical functions; measured by the qualifications of their personnel in veterinary and technical positions.* **A. Professional competencies of veterinarians including the OIE Day 1 competencies**	Levels of advancement
	1. The veterinarians' practices, knowledge and attitudes are of a variable standard that usually allow for elementary clinical and administrative activities of the VS.
	2. The veterinarians' practices, knowledge and attitudes are of a uniform standard that usually allow for accurate and appropriate clinical and administrative activities of the VS.
	3. The veterinarians' practices, knowledge and attitudes usually allow undertaking all professional/technical activities of the VS (e.g. epidemiological surveillance, early warning, public health, etc.).
	4. The veterinarians' practices, knowledge and attitudes usually allow undertaking specialised activities as may be needed by the VS.
	5. The veterinarians' practices, knowledge and attitudes are subject to regular updating, or international harmonisation, or evaluation.

Terrestrial Code reference(s): Annexe 1

Evidence *(Appendix 6):* H18, H21-22, H24, H109, P140-155, P273, P292

Findings:

The Onderstepoort Veterinary Faculty of the University of Pretoria (OVF) is recognised internationally. OVF regularly collaborates with veterinary faculties in Utrecht, Oslo, London and the US and is active in global accreditation initiatives (e.g., EAEVE). Automatic registration of OVF graduates is established with UK, NZ & Australia. OVF serves as an OIE collaborating center for wildlife.
OVF facilities, resources, and budget are very good with 116 full time teaching staff and 240 support staff. OVF is currently delivering a 6 year curriculum that was recently renewed to address the new challenges of veterinary profession in South Africa.
Starting this year there will be 190 veterinary graduates per year, an increase from 130. The increase is based on an evaluation of the numbers of veterinarians required in the rural areas, large animal practice and for public health; specific training will include 'life skills' training to approach these disciplines. OVF also provides specialized training at masters, and PhD levels. OVF is working regionally to address the growing need for veterinarians in southern Africa and working to improve the regional level of veterinary education in view of future regional integration that may allow automatic recognition of veterinary degrees from other faculties in the region.

Strengths:

- OVF is very strong and internationally recognized.
- High levels of experience, competency and commitment and the strong relationships of individual veterinarians allow compensation for the deficiencies or constraints that are occuring in the institutional organisation (CC I.4 and I.6).

Weaknesses:

- No specialised training in public veterinary administration.
- More orientated on high level pet practice than large animals and VPH.
- The very high level of competition for selection may lead to unrealistic expectations from the students (level of income, recognition, professional constraints, etc.) and fails to address the shortage of students coming from a range of different geographic and socio-economic backgrounds.

Recommendations:

- Ensure that OVF develops its capacity for twining with other SADC veterinary faculties to ensure that the quality and quantity of veterinary training is harmonized in the SADC region and maintains the current level of professional achievement.
- Promote selection options to ensure better demographic diversity.
- Establish twinning with OIE collaborating centres for training of public veterinarians.

B. Competencies of veterinary para-professionals	Levels of advancement
	1. The majority of veterinary para-professionals have no formal entry-level training.
	2. The training of veterinary para-professionals is of a variable standard and allows the development of only basic competencies.
	3. The training of veterinary para-professionals is of a uniform standard that allows the development of only basic specific competencies.
	4. The training of veterinary para-professionals is of a uniform standard that allows the development of some advanced competencies (e.g. meat inspection).
	5. The training of veterinary para-professionals is of a uniform standard and is subject to regular evaluation and/or updating.

Terrestrial Code reference(s): Annexe 1

Evidence *(Appendix 6):* H18, H23, H25, H68-69, H109, H213, P140-155, P258, P273, P292, P454

Findings:

Four educational institutions are training different categories of veterinary para-professionals (e.g., AHTs at the School of Agricultural Sciences, North West University and the College of Agriculture and Environmental Sciences, University of South Africa; veterinary technologists at the Tshwane University of Technology; and, veterinary nurses at the University of Pretoria. There are other institutions providing courses for AHTs, but they are not accredited by SAVC, and their graduates have to pass a SAVC examination before being registered and employed as veterinary para-professionals.

Veterinary para-professionals, specifically AHTs, working in the VS after passing a three-year course must pass an SAVC examination before registration.

There are a large number of graduates each year which leads to considerable unemployment; this problem can never be compensated by recruitment into the public sector (even considering the number of current vacancies).

A consultancy report by KPMG Ltd suggested that a ratio of 6 veterinary para-professionals per veterinarian would be necessary in the future; this is inconsistent with the long term development of a modern veterinary system which emphasises the importance of veterinarians rather than veterinary para-professionals. OIE standards highlight the imperative for veterinarians in the field to be in contact with animals and farmers and does not support over reliance on veterinary para-professionals (Article 2.3.5 of Terrestrial OIE Code)

Meat inspectors are trained as environmental health practitioners (3 year course for red meat) and professionally registered by the Health Professions Council in line with current DoH regulations and are administratively registered by the provincial VS. Meat inspectors working in poultry and game inspection only receive 6-12 months training.

Strengths:

- Curriculums are are clearly differentiated and registered.

Weaknesses:

- Number of graduates is in excess of the country needs leading to high levels of unemployment.
- Variability of training requirements for meat inspectors servicing different sectors and absence of their registration with SAVC.

Recommendations:

- Reassess the need for veterinary para-professionals in the future on the basis of the reorganization and strengthening of the VS in conformity with OIE standards.

I-3 Continuing education (CE)[2] *The capability of the VS to maintain and improve the competence of their personnel in terms of relevant information and understanding; measured in terms of the implementation of a relevant training programme.*	Levels of advancement
	1. The VS have no access to continuing veterinary, professional or technical CE.
	2. The VS have access to CE (internal and/or external programmes) on an irregular basis but it does not take into account needs, or new information or understanding.
	3. The VS have access to CE that is reviewed annually and updated as necessary, but it is implemented only for some categories of the relevant personnel.
	4. The VS have access to CE that is reviewed annually and updated as necessary, and it is implemented for all categories of the relevant personnel.
	5. The VS have up-to-date CE that is implemented for all relevant personnel and is subject to regular evaluation of effectiveness.

Terrestrial Code reference(s): Annexe 1

Evidence *(Appendix 6):* H38, E66, P122-123, P140-155

Findings:

CE (CPD) is a requirement for all vets to maintain registration with the VSB (SAVC). The public sector provides regular relevant training and updates which are included in the employee assessment process. The public sector does provide support (bursaries and study leave) for additional educational qualifications and staff do not receive recognition or salary increases to reflect specialisations achieved.

Public sector veterinary para-professionals are also with provided training relevant to their professional development.

Within the private sector SAVA is very active in providing accessible CE that is reviewed on a regular basis.

Strengths:

- SAVC and SAVA are both active in the development and review of CE opportunities provided.

Weaknesses:

- The private and public sector CE opportunities do not overlap.
- CE provided is not subjected to regular evaluation of effectiveness.

Recommendations:

- Develop a mechanism to evaluate the effectiveness and efficiency of CE for purpose of better governance.
- Plan CE to ensure it covers the priority areas, avoid unnecessary overlap, save resources with less costly trainings and on-line tools, etc.

[2] Continuing education includes Continuous Professional Development (CPD) for veterinary, professional and technical personnel.

I-4 Technical independence *The capability of the VS to carry out their duties with autonomy and free from commercial, financial, hierarchical and political influences that may affect technical decisions in a manner contrary to the provisions of the OIE (and of the WTO SPS Agreement where applicable).*	Levels of advancement
	1. The technical decisions made by the VS are generally not based on scientific considerations.
	2. The technical decisions take into account the scientific evidence, but are routinely modified to conform to non-scientific considerations.
	3. The technical decisions are based on scientific evidence but are subject to review and possible modification based on non-scientific considerations.
	4. The technical decisions are made and implemented in general accordance with the country's OIE obligations (and with the country's WTO SPS Agreement obligations where applicable).
	5. The technical decisions are based only on scientific evidence and are not changed to meet non-scientific considerations

Terrestrial Code reference(s): Annexe 1

Evidence *(Appendix 6):* P189, *see other CCs where mentioned*

Findings:

The high level of competency and commitment of all staff as well as the salary level (averages estimated 3000 €/month for a state veterinarian as a total cost to employer packqge without social benefits and before tax and 1400 €/month for a veterinary para-professional before tax and in addition to social benefits, with tax rates for both at around 40%) and social recognition supported by a clear legal framework are one of the main pillars achieving technical independence of the VS in South Africa.

Appointment and selection procedures are well defined, transparent and implemented at all levels. Although some political influence has been described they may be considered as consistent within the norms of political authority. For instance, the VS maintained a clear science based decision to prevent import of wildlife from FMD infected countries against very high pressure from both political authorities and influential private lobbies.

Some political interference was observed in the provinces especially in those where there has been a break in the chain of command between the province, district and municipalities.

There are challenges to the technical independence of decisions including:

- TB and Brucella testing done by private veterinarians without formal official delegation procedures – this does not ensure technical independence.
- On-site meat inspectors are paid either directly by the owner or indirectly through private companies – these companies are operating in a competitive market.
- Secondary slaughter inspection is delegated to private veterinarians who are paid directly by the owners of the facilities that they are supposed to control - this secondary inspection is only implemented on the request of the meat inspector.

Strengths:

- Competence and commitment of all VS staff.
- Clear procedures for appointment and management of human resources.

Weaknesses:

- Breaks in the chain of command at provincial level (especially with the matrix system).
- Lack of formal official delegation, procedures and control of private veterinarians.
- Payment by the private sector for VPH inspection.

Recommendations:

- Develop proper financial mechanism (e.g., levy fees for inspection).
- Appoint public staff when necessary.
- Formalize official delegation procedures and controls.

I-5 Stability of structures and sustainability of policies *The capability of the VS structure and/or leadership to implement and sustain policies over time.*	Levels of advancement
	1. Substantial changes to the organisational structure and/or leadership of the public sector of the VS frequently occur (e.g. annually) resulting in lack of sustainability of policies.
	2. Sustainability of policies is affected by changes in the political leadership and/or the structure and leadership of VS
	3. Sustainability of policies is not affected or is slightly affected by changes in the political leadership and/or the structure and leadership of VS.
	4. Policies are sustained over time through national strategic plans and frameworks and are not affected by changes in the political leadership and/or the structure and leadership of VS
	5. Policies are sustained over time and the structure and leadership of the VS are stable. Modifications are based on an evaluation process, with positive effects on the sustainability of policies.

Terrestrial Code reference(s): Annexe 1

Evidence *(Appendix 6):*

Findings:

The VS structure has been changed sevral times in the recent years and these changes have negatively affected the organization at central level, and have led to a break in the chain of command between the central and provincial level (and even in some provinces between province, district and municipality levels). Change of polityical leaders does not result in change of senior VS management.

As a consequence, the ability to define and implement policies, especially in animal health, has deteriorated leading to a lack of control of endemic diseases, e.g., TB, brucellosis, and difficulty in controlling outbreaks, e.g., FMD, which has resulted in a loss of export markets; it is only under the pressure of a widespread outbreak that the VS receives the authority to act, e.g., CSF eradication.

In VPH, there is now a double standard of meat inspection between export and domestic/local markets.

Although revenue is rational within the national socio-economic context and the requirements of technical independence, the recruitment process, progression of salaries during a carreer, and lack of recognition of specialised training (e.g. PhD) were identified as hampering the development and stability of the VS structure. Young veterinarians are not attracted by the public sector and/or resign after some years.

Strengths:

- Stability and competence of the older personnel has maintained institutional memory and commitment.

Weaknesses:

- Broken chain of VS command reduces the ability of the VS to deliver coherent programmes.
- Lack of attractive salaries/careers in the public sector of the VS.

Recommendations:

- Develop strategic plan to restore the chain of command.
- Ensure formal official delegation to private veterinarians and clear policies to distinguish public and private good.
- Develop clear national priorities, strategies and operation plans for animal health and VPH.
- Recognise “scarce-skills” in the public VS to boost recruitsment and stimulate careers.

I-6 Coordination capability of the Veterinary Services A. Internal coordination (chain of command) *The capability of the VS to coordinate its resources and activities (public and private sectors) with a clear chain of command, from the central level (the Chief Veterinary Officer), to the field level of the VS in order to implement all national activities relevant for OIE Codes (i.e. surveillance, disease control and eradication, food safety and early detection and rapid response programmes).*	Levels of advancement
	1. There is no formal internal coordination and the chain of command is not clear.
	2. There are internal coordination mechanisms for some activities but the chain of command is not clear.
	3. There are internal coordination mechanisms and a clear and effective chain of command for some activities.
	4. There are internal coordination mechanisms and a clear and effective chain of command at the national level for most activities.
	5. There are internal coordination mechanisms and a clear and effective chain of command for all activities and these are periodically reviewed/audited and updated.

Terrestrial Code reference(s): Annexe 1

Evidence *(Appendix 6):* H2, H26, H75, H90, H95, H98, H112, H130, H165, H175, E1-18, P156, P295-296, P306, P309, P324, P336-337, P365

Findings:

The VS organisation is detailed in part II.3.B of this report.

The VS is included in the constitution as a concurrent domain of the national and provincial authorities, although Plant Health has been maintained as a national authority (as are the police and military).

Despite the intergovernmental mechanisms in place and the MOU signed by all the provincial VS's and DAFF, there is a break in the chain of command between national and provincial levels.

In some provinces, there is also a further break between province, district and municipal levels, with veterinary para-professionals not reporting to veterinarians but to municipal agriculture staff. This so-called "matrix system" (mixing all agriculture staff in a general pool under the municipal authority) has been in place for a number of years - although this system has been tested in many developing countries and has failed. This system results in a lack of information flow at all levels. The VS have struggled to implement uniform policy, with the exception of some export requirements and some zoning activities.

The consequences of the broken chain of command are extensively described in many Critical Competencies in this report as a key constraint.

Moreover, the design of the DAFF organisation chart was driven by administrative constraints rather than by functional requirements (e.g. VPH incorporating identification, the split between border inspection and import certification. See part II.3.B). The DAFF level is understaffed and busy working on emergencies and covering the deficiencies of the chain of command. There is not enough staff to develop planning, control and auditing.

Strengths:

- Competence, commitment and the personal relationships of VS staff mitigate the side effects of the break in the chain of command where possible.
- Wish to restore a national chain of command is shared by almost all staff and stakeholders.

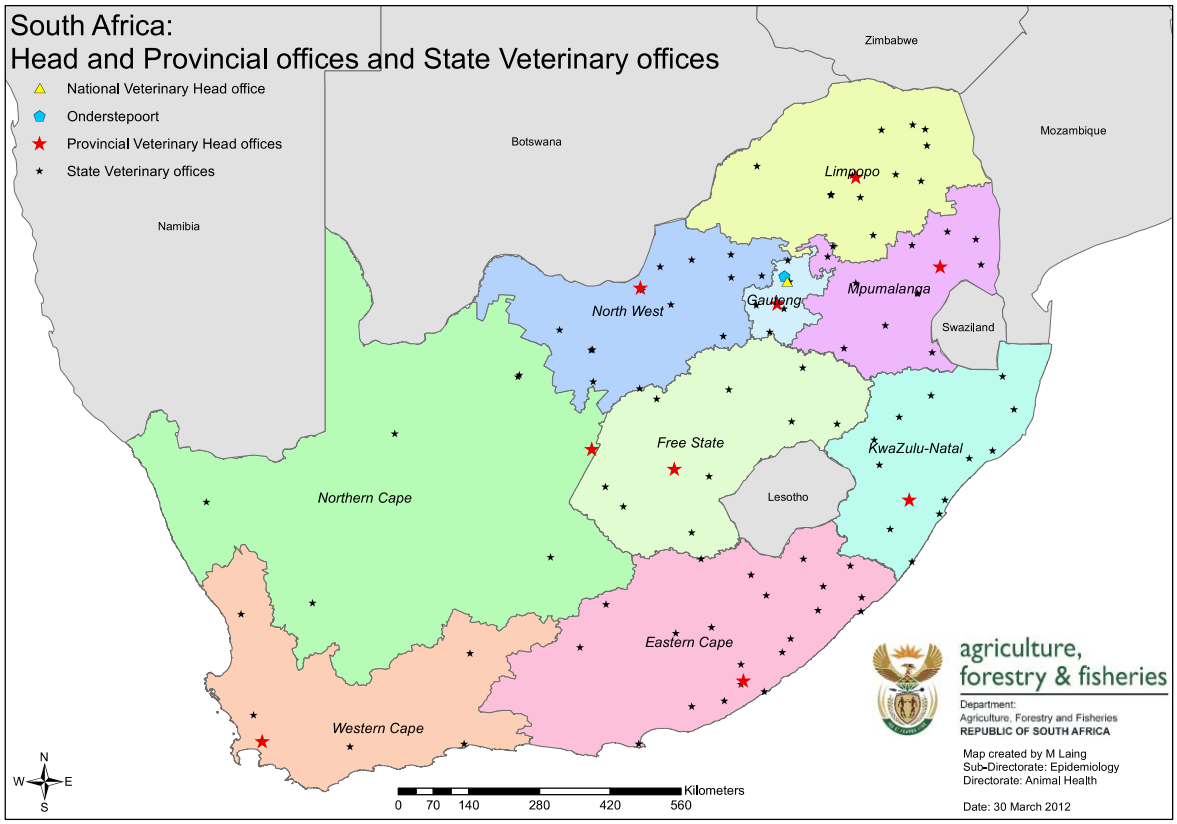
Weaknesses:

- In the near future, the cohesion and corporate memory of the VS staff will decline - as a normal consequence of the turnover of personnel at all levels.
- The chain of command is seen in some instances as a top-down approach without room for any local adaptation and flexibility.
- Lack of staff at central level to undertake planning and auditing.

Recommendations:

- Restore the VS as a fully national authority with a clear description of the chain of command for all domains.

  Note that currently there is discussion on how to partially restore the chain of command while accommodating local political pressures but avoiding constitutional reform. In the context of South Africa, splitting the VS authority and capability in any of its domains or activitties will inevitably result in the lack of coherent control to implement AH and VPH activities; this includes splitting activities such as export and national markets, emergency and routine operations, animal disease control and VPH control, commercial and community services. The complexity of South Africa's geography, socio-economic situation and disease challenges requires a nationally integrated and coordinated VS to deliver AH and VPH benefits.



B. External coordination	Levels of advancement
The capability of the VS to coordinate its resources and activities (public and private sectors) at all levels with other relevant authorities as appropriate, in order to implement all national activities relevant for OIE Codes (i.e. surveillance, disease control and eradication, food safety and early detection and rapid response programmes). Relevant authorities include other ministries and Competent Authorities, national agencies and decentralised institutions.	1. There is no external coordination.
	2. There are informal external coordination mechanisms for some activities, but the procedures are not clear and/or external coordination occurs irregularly.
	3. There are formal external coordination mechanisms with clearly described procedures or agreements for some activities and/or sectors.
	4. There are formal external coordination mechanisms with clearly described procedures or agreements at the national level for most activities, and these are uniformly implemented throughout the country.
	5. There are national external coordination mechanisms for all activities and these are periodically reviewed and updated.

Terrestrial Code reference(s): Annexe 1

Evidence *(Appendix 6):* H112, H130-132, H176, P28-30, P122-123, P295, P355, P375, P415

Findings:

At the national level the VS formally coordinate with human health (particularly with DoH and NICD for zoonoses, relevant authority for veterinary medicines), wildlife, police, customs and even military (e.g., disaster management).

At the provincial level regular formal meetings are held with representatives of DoH, the police and municipal and district authorities (e.g; quarterly disaster management committees).

At the field level, collaboration is effective, for instance at border posts, in national parks (KNP) or for the purpose of livestock theft or in the exchange of information on zoonoses (e.g., rabies/dog bites, brucellosis infections in humans). Experience shows that police and military authorities have been mobilized for rapid response in cases of outbreaks.

Within 'matrix' managed provinces, where the chain of command is broken up to district and municipal level, such external coordination is much more difficult and obviously weaker.

Strengths:

- There is commitment from different institutions, with formal mechanisms and detailed procedures.
- Good coordination with border officials and emergency management.

Weaknesses:

- Lack of internal chain of command does not support uniform external coordination to ensure consistent implementation throughout the country.
- Responsibilities for monitoring and/or maintenance of fences around conservation areas requires clarification.
- Coordination with human health authorities on veterinary medicines regulation needs to be enhanced.

Recommendations:

- Restoration of the internal chain of command within VS is necessary to ensure adequate external coordination for the entire country.

I-7 Physical resources *The access of the VS to relevant physical resources including buildings, transport, telecommunications, cold chain, and other relevant equipment (e.g. computers).*	Levels of advancement
	1. The VS have no or unsuitable physical resources at almost all levels and maintenance of existing infrastructure is poor or non-existent.
	2. The VS have suitable physical resources at national (central) level and at some regional levels, and maintenance and replacement of obsolete items occurs only occasionally.
	3. The VS have suitable physical resources at national, regional and some local levels and maintenance and replacement of obsolete items occurs only occasionally.
	4. The VS have suitable physical resources at all levels and these are regularly maintained.
	5. The VS have suitable physical resources at all levels (national, sub-national and local levels) and these are regularly maintained and updated as more advanced and sophisticated items become available.

Terrestrial Code reference(s): Annexe 1

Evidence *(Appendix 6):* H59, H85, H111, H115, P1-2, P111-121, P134-139, P181-184, P200-212, P215-216, P255-256, P262, P274-277, P284-287, P289, P299, P306, P309, P324, P336-337, P339-341, P343-345, P358-359, P365

Findings:

Generally the VS have an adequate number and quality of furnished buildings, vehicles, telecommunication, cold chain, and computer equipment. These are maintained regularly and when necessary, new equipment is provided. Vehicles used by VS may be: shared or VS dedicated government vehicles; or subsidized private vehicles (there are well defined procedures to acquire, maintain and replace private vehicles for professional use). Reimbursement rates for the use of private vehicles appear to be adequate (3.5 R/km).

In some provinces, access to vehicles is problematic and monthly mileage limitations further hamper the ability to effectively conduct field activities.

In some provinces (e.g., KZN and EC) the mission team noted that some facilities were not well maintained and resourced. It was also observed that in many areas some VS veterinarians and many AHT did not have vehicles, cell phones, computers, or official email.

Strengths:

- Generally well resourced

Weaknesses:

- Lack of comprehensive description of the distribution of physical resources as required by OIE standards
- The break in the chain of command will increase the discrepancies of physical resources between provinces resulting in a further loss national capacity of the VS.
- Procurement procedures in some provinces are delayed and irregular.
- Limited mileage for vehicles in some provinces limits the capacity to perform core functions.

Recommendations:

- Collate data about physical resources at DAFF level as required by OIE standards.
- Ensure that all public AHTs are provided with adequate budget for transportation and communication.
- Increase the transportation capacities of the VS in order to ensure a proper implementation of official activities.

I-8 Operational funding *The ability of the VS to access financial resources adequate for their continued operations, independent of political pressure.*	Levels of advancement
	1. Funding for the VS is neither stable nor clearly defined but depends on resources allocated irregularly.
	2. Funding for the VS is clearly defined and regular, but is inadequate for their required base operations (i.e. disease surveillance, early detection and rapid response and veterinary public health).
	3. Funding for the VS is clearly defined and regular, and is adequate for their base operations, but there is no provision for new or expanded operations.
	4. Funding for new or expanded operations is on a case-by-case basis, not always based on risk analysis and/or cost benefit analysis.
	5. Funding for all aspects of VS activities is adequate; all funding is provided under full transparency and allows for full technical independence, based on risk analysis and/or cost benefit analysis.

Terrestrial Code reference(s): Annexe 1

Evidence *(Appendix 6):* E50-56, P189, P295

Findings:

Although it was not possible to collate the operational budgets of all provinces, it appeared that the VS are generally well funded and in most cases can implement their base operations, and in some cases develop expanded operations (especially in the Northern and Western Cape and Gauteng).

On the contrary, in provinces where the matrix system (see short description in I.6.A) has been implemented there appears to be less regular funding and several provinces are now under budget restrictions that are limiting the capacity to perform routine functions. In these provinces the procurement procedures are made more difficult by the need for requests to be processed through the extension office and then gain approval from the Head of Department; this often results in shortages of needed supplies limiting the ability to conduct field activities or preform disease control activities. In these provinces the ratio between salaries and total operational budget demonstrates that there are very few resources to implement activities.

However, because of the broken chain of command, and except for FMD control and some active surveillance, the VS do not implement any national compulsory AH programs (refer to CC II.5, 7 and III.6). This limits the current need for financial resources.

Strengths:

- Generally good level of operational funding regularly provided.

Weaknesses:

- No comprehensive data about the distribution of operational funding as required by OIE standards, because of the break of chain of command.
- Possible current or further deficiencies in operational funding due to the implementation of the matrix system in some provinces.
- Funding is not appropriate to implement compulsory AH control programs nationally
- Lack of clear policies on cost recovery within public sector; specifically variable handling of inspection fees and other activities over time and from area to area.

Recommendations:

- Collate operational funding data at DAFF level as already done for human resources.
- Develop clear policies of cost recovery when relevant.
- Strengthen a national budget with ear-marked funding to develop national programs.

I-9 Emergency funding	Levels of advancement
The capability of the VS to access extraordinary financial resources in order to respond to emergency situations or emerging issues; measured by the ease of which contingency and compensatory funding (i.e. arrangements for compensation of producers in emergency situations) can be made available when required.	1. No funding arrangements exist and there is no provision for emergency financial resources.
	2. Funding arrangements with limited resources have been established, but these are inadequate for expected emergency situations (including emerging issues).
	3. Funding arrangements with limited resources have been established; additional resources for emergencies may be approved but approval is through a political process.
	4. Funding arrangements with adequate resources have been established, but in an emergency situation, their operation must be agreed through a non-political process on a case-by-case basis.
	5. Funding arrangements with adequate resources have been established and their rules of operation documented and agreed with interested parties.

Terrestrial Code reference(s): Annexe 1

Evidence *(Appendix 6):*

Findings:

Although it was not possible to collate the emergency budgets of all provinces, it appears that the VS are generally able to access adequate funding through the national budget or treasury whenever there is a disease outbreak that needs to be addressed. This was the case for FMD, CSF and avian influenza outbreaks in the recent past. In several recent examples in the pig industry (eg. PRRS and recent ASF outbreaks), the industry incentivized farmers to slaughter their animals or allow them to be destroyed, because of the legal complications within the compensation process.

However, the lack of prior arrangement with relevant parties for compensation led to difficulties and legal action; one conflict was taken to court seeking compensation for lost genetic value - this may present a threat in future emergencies.

Strengths:

- Funds for emergency situations are generally provided as needed but on an *ad hoc* basis.

Weaknesses:

- Lack of prior arrangement with relevant parties.
- Lack of standardisation of compensation policy and processes.

Recommendations:

- Develop a clear protocol for emergency funding options between national, provincial and industry groups.
- Resolve the legal problem and establish procedures for compensation in consultation with interested parties that define general principles and details for specific disease / species / breed / systems.

I-10 Capital investment *The capability of the VS to access funding for basic and additional investments (material and non material) that lead to a sustained improvement in the VS operational infrastructure.*	Levels of advancement
	1. There is no capability to establish, maintain or improve the operational infrastructure of the VS.
	2. The VS occasionally develops proposals and secures funding for the establishment, maintenance or improvement of operational infrastructure but this is normally through extraordinary allocations.
	3. The VS regularly secures funding for maintenance and improvements of operational infrastructure, through allocations from the national budget or from other sources, but there are constraints on the use of these allocations.
	4. The VS routinely secures adequate funding for the necessary maintenance and improvement in operational infrastructure.
	5. The VS systematically secures adequate funding for the necessary improvements in operational infrastructure, including with participation from interested parties as required.

Terrestrial Code reference(s): Annexe 1

Evidence *(Appendix 6):*

Findings:

Although it was not possible to collate the capital investment budgets of all provinces, from the field visits it appeared that the VS is generally well funded and in most cases can maintain their operational infrastructure and in some cases improve their infrastructure (especially in the Northern and Western Cape and Gauteng).

Procurement arrangements in some 'matrix' provinces, where the chain of command has been broken down to municipal level, were reported as being both irregular and delayed. In some cases, the need for specialist equipment and maintenance (eg laboratory) was being adversely impacted by the generic procurement protocols and/or process 'irregularities'.

Strengths:

- Good overall capital investment provision.

Weaknesses:

- Lack of comprehensive data about the distribution of operational funding as required by OIE standards, because of the break in the chain of command.
- The capacity to regularly secure funding for maintenance and improvements is variable between provinces.

Recommendations:

- Collate capital investment data at DAFF level as is already done for human resources.
- Strengthen a national budget with ear-marked funding to secure investment in VS.

I-11. Management of resources and operations *The capability of the VS to document and manage their resources and operations in order to analyse, plan and improve both efficiency and effectiveness.*	Levels of advancement
	1. The VS do not have adequate records or documented procedures to allow appropriate management of resources and operations
	2. The VS have adequate records and/or documented procedures but do not use these for management, analysis, control or planning.
	3. The VS have adequate records, documentation and management systems and use these to a limited extent for the control of efficiency and effectiveness
	4. The VS regularly analyse records and documented procedures to improve efficiency and effectiveness
	5. The VS have fully effective management systems, which are regularly audited and permit a proactive continuous improvement of efficiency and effectiveness.

Terrestrial Code reference(s): Annexe 1

Evidence *(Appendix 6):* H111, H115, H231-232, E64, E68, P140-155, P187-188, P281, P292, P295, P300, P348, P372-373, P377, P391-400

Findings:

The VS at all levels have adequate records of data related to their resources and operations. Procedures are in place for many activities (e.g., import/export, food safety, active surveillance). Audits are conducted but only for the purpose of financial and human resource management.

Annual reports at provincial and national levels collate most of these data, with the important exception of those related to small farmers (which remain partially or entirely available only at the AHT sub-office level). In “matrix” provinces where the chain of command is further compromised there is no indication that the VS has access to the data needed for review of their resources and operations.

However, no comparative analysis of efficacy and efficiency of activities and programs has been undertaken over time or between the provinces. As well no cost-benefit analysis was provided during the mission. As a consequence there are limitations for strategic planning and even sometimes no accurate operational planning or evaluation.

Strengths:

- Availability of most raw data for all domains at field level.
- Well established procedures, reporting and audit formats for most activities.

Weaknesses:

- Overall data system is hampered by the broken chain of command and lack of computerised databases.
- Major deficiency of skills to enhance the capability of VS to advocate their needs.

Recommendations:

- Develop compulsory integrated comprehensive and unified data management system (including specific/limited access for accredited laboratories, for official delegated veterinarians or even stakholders).
- Develop a strategic plan and include systematic comparative, efficacy, efficiency and cost-benefit analysis for all relevant operations/activities.
- Provide DAFF with additional human resources to undrtake these tasks.

III.2 Fundamental component II: Technical authority and capability

This component of the evaluation concerns the authority and capability of the VS to develop and apply sanitary measures and science-based procedures supporting those measures. It comprises eighteen critical competencies

For all sections of this chapter, the critical competency includes collaboration with relevant authorities, including other ministries and Competent Authorities, national agencies and decentralised institutions that share authority or have mutual interest in relevant areas.

Critical competencies:

Section II-1	**Veterinary laboratory diagnosis**
	A. Access to veterinary laboratory diagnosis
	B. Suitability of national laboratory infrastructures
Section II-2	**Laboratory quality assurance**
Section II-3	**Risk analysis**
Section II-4	**Quarantine and border security**
Section II-5	**Epidemiological surveillance and early detection**
	A. Passive Epidemiological surveillance
	B. Active Epidemiological surveillance
Section II-6	**Emergency response**
Section II-7	**Disease prevention, control and eradication**
Section II-8	**Food safety**
	A. Regulation, authorisation and inspection of establishments for production, processing and distribution of food of animal origin
	B. Ante and post mortem inspection at abattoirs and associated premises
	C. Inspection of collection, processing and distribution of products of animal origin
Section II-9	**Veterinary medicines and biologicals**
Section II-10	**Residue testing**
Section II-11	**Animal feed safety**
Section II-12	**Identification and traceability**
	A. Animal identification and movement control
	B. Identification and traceability of products of animal origin
Section II-13	**Animal welfare**

Terrestrial Code References:

Chapter 1.4. on Animal health surveillance.
Chapter 1.5. on Surveillance for arthropod vectors of animal diseases.
Chapter 2.1. on Import risk analysis.
Points 6, 7 and 9 of Article 3.1.2. on Fundamental principles of quality: Veterinary legislation / General Organisation / Procedures and standards.
Point 1 of Article 3.2.4. on Evaluation criteria for quality systems.
Point 3 of Article 3.2.6. on Evaluation criteria for material resources: Technical.
Points 1 and 2 of Article 3.2.7. on Legislation and functional capabilities: Animal health, animal welfare and veterinary public health / Export/import inspection.
Points 1-3 of Article 3.2.8. on Animal health controls: Animal health status / Animal health control / National animal disease reporting systems.
Points 1-5 of Article 3.2.9. on Veterinary public health controls: Food hygiene / Zoonoses / Chemical residue testing programmes / Veterinary medicines/ Integration between animal health controls and veterinary public health.
Sub-point f) of Point 4 of Article 3.2.10. on Veterinary Services administration: Formal linkages with sources of independent scientific expertise.

Points 2 and 5-7 of Article 3.2.14. on National information on human resources / Laboratory services / Veterinary legislation, regulations and functional capabilities / Animal health and veterinary public health controls.
Article 3.4.12. on Human food production chain.
Chapter 4.1. on General principles on identification and traceability of live animals.
Chapter 4.2. on Design and implementation of identification systems to achieve animal traceability.
Chapter 4.12. on Disposal of dead animal.
Chapter 6.2. on Control of biological hazards of animal health and public health importance through ante- and post-mortem meat inspection.
Chapter 6.3. on Control of hazards of animal health and public health importance in animal feed.
Chapters 6.6. to 6.10. on Antimicrobial resistance.
Chapter 7.1. Introduction to the recommendations for animal welfare.
Chapter 7.2. Transport of animals by sea.
Chapter 7.3. Transport of animals by land.
Chapter 7.4. Transport of animals by air.
Chapter 7.5. Slaughter of animals.
Chapter 7.6. Killing of animals for disease control purposes.

II-1 Veterinary laboratory diagnosis **A. Access to veterinary laboratory diagnosis** *The authority and capability of the VS to have access to laboratory diagnosis in order to identify and record pathogenic agents, including those relevant for public health, that can adversely affect animals and animal products.*	Levels of advancement
	1. Disease diagnosis is almost always conducted by clinical means only, with no access to and use of a laboratory to obtain a correct diagnosis.
	2. For major zoonoses and diseases of national economic importance, the VS have access to and use a laboratory to obtain a correct diagnosis.
	3. For other zoonoses and diseases present in the country, the VS have access to and use a laboratory to obtain a correct diagnosis.
	4. For diseases of zoonotic or economic importance not present in the country, but known to exist in the region and/ or that could enter the country, the VS have access to and use a laboratory to obtain a correct diagnosis.
	5. In the case of new and emerging diseases in the region or world, the VS have access to and use a network of national or international reference laboratories (e.g. an OIE Reference Laboratory) to obtain a correct diagnosis.

Terrestrial Code reference(s): Annexe 1

Evidence *(Appendix 6):* H1, H22, H51, H55, H73, H81-82, H96, H103, H105, H112, H133, H189, H221, E29, E42, E58, P1-2, P24-27, P34-37, P70-78, P98-104, P190-197, P200-212, P218, P220-244, P282-283

Findings:

Field visits and other evidence confirmed that in all instances the VS have access to the range of laboratory diagnosis needed and these responsibilities are allocated logically within the national veterinary laboratory network, including private laboratories.

No examples of lack of access could be identified during the mission.

The VS have access to many international and regional reference laboratories.

Strengths:

- Comprehensive access to laboratory analysis.

Weaknesses:

- Concerns about the global independent management/authority of OVI from the VS, and the outsourcing of many laboratory analysis which might lead over time to a lack of access to timely correct diagnostic testing.

Recommendations:

- Ensure that the MoU with OVI is enforced and is audited regularly.

II-1 Veterinary laboratory diagnosis B. Suitability of national laboratory infrastructures *The sustainability, effectiveness and efficiency of the national (public and private) laboratory infrastructures to service the needs of the VS*	Levels of advancement
	1. The national laboratory infrastructure does not meet the need of the VS.
	2. The national laboratory infrastructure meets partially the needs of the VS, but is not entirely sustainable, as organisational deficiencies with regard to the effective and efficient management of resources and infrastructure (including maintenance) are apparent
	3. The national laboratory infrastructure generally meets the needs of the VS. Resources and organisation appear to be managed effectively and efficiently, but their regular funding is inadequate to support a sustainable and regularly maintained infrastructure
	4. The national laboratory infrastructure generally meets the needs of the VS and is subject to timely maintenance programmes but needs new investments in certain aspects (e.g. accessibility to laboratories, number or type of analyses).
	5. The national laboratory infrastructure meets the needs of the VS, and is sustainable and regularly audited.

Terrestrial Code reference(s): Annexe 1

Evidence *(Appendix 6):* H1, H55, H73, H133, H221, E29, E58, P1-2, P24-27, P200-212, P271-272, P308, P310-313, P378, P379-390, P411, P455-P456

Findings:

The veterinary laboratory infrastructure consists of the independent national reference laboratory at OVI; 8 public provincial laboratories with 10 satellite laboratories within the VS and 15 accredited private laboratories. The range of diagnostics available is comprehensive and capable of providing the correct diagnosis in a timely manner.

During the mission the OVI, all provincial, 4 satellite and 3 private laboratories were visited.

In general, there were adequate human and physical resources in place. The level of activity (around 100,000 samples/year at provincial level, 10,000 at satellite laboratories) and types of tests performed are appropriate for the needs of the VS and compatible with maintaining an appropriate level of service quality.

Although a dedicated formal and regular process to evaluate the suitability of national laboratory infrastructure is not present, the VS adapt their laboratory infrastructure to their changing needs. New laboratories are accredited based on the needs, e.g., ostrich laboratory for avian influenza, as well as some laboratories at district level have been restructured or closed in the past year. There is effective accreditation (approval) of private veterinary laboratories to undertake official testing, which has been growing over recent years as OVI's capacity has not kept up with increased demand. For example, all histopathology and much of the testing required for commercial poultry and pig compartmentalisation is now undertaken in private laboratories, much on a 'user pays' basis.

Strengths:

- Adapted network and resources for laboratory infrastructures

Weaknesses:

- In some provinces, the break in the chain of command has resulted in the deferral of maintenance and updating, linked to the development of an excessive number of small laboratories under local authority.

Recommendations:

- Ensure that development of small laboratories under local initiative does not lead to a loss of quality in the delivery of timely and correct diagnostics for national programs.


Veterinary Laboratories in South Africa
Central Laboratory: ARC - OVI
Government Veterinary Laboratories
Louis Trichardt VL (Makhado)
Lephalale VL
Limpopo
Mokopane PVL
Skukuza VL
Ehlanzeni District VL
ARC - OVI
Mpumalanga
Gauteng
North West
Mpumalanga PVL
Potchefstroom PVL
Vryburg VL
Kroonstad VL
Vryheid VL
Kimberley PVL
Free State
Bloemfontein PVL
KwaZulu-Natal
Northern Cape
Allerton PVL
Middelburg PVL
Queenstown VL
Eastern Cape
Beaufort West VL
Grahamstown VL
Western Cape
Stellenbosch PVL
N
W
E
S
agriculture, forestry & fisheries
Department:
Agriculture, Forestry and Fisheries
REPUBLIC OF SOUTH AFRICA
Map created by M Laing
Sub-Directorate: Epidemiology
Directorate: Animal health
Date: 15 March 2012

II-2 Laboratory quality assurance *The quality of laboratories (that conduct diagnostic testing or analysis for chemical residues, antimicrobial residues, toxins, or tests for, biological efficacy, etc.) as measured by the use of formal QA systems including, but not limited to, participation in relevant proficiency testing programmes.*	Levels of advancement
	1. No laboratories used by the public sector VS are using formal QA systems.
	2. Some laboratories used by the public sector VS are using formal QA systems.
	3. All laboratories used by the public sector VS are using formal QA systems.
	4. All the laboratories used by the public sector VS and most or all private laboratories are using formal QA systems.
	5. All the laboratories used by the public sector VS and most or all private laboratories are using formal QA programmes that meet OIE, ISO 17025, or equivalent QA standard guidelines.

Terrestrial Code reference(s): Annexe 1

Evidence *(Appendix 6):* H44, H96, H105, H110, H112, H217, P3-10, P24-27, P200-212, P242, P265, P270, P278-281, P314-315

Findings:

OVI is accredited as an international reference laboratory for AHS, ASF, Bluetongue, FMD, Lumpy Skin Disease, Rabies, RVF and sheep and goat pox, and has a formal QA system certified by SABS for ISO 17025 accreditation.

Provincial laboratories have formal QA systems and some are on the way to accreditation by SABS. Inter-laboratory comparison tests are used in some satellite provincial laboratories.

Private accredited laboratories are using QA systems and some have received accreditation from SABS.

DAFF undertakes comprehensive annual audits of these laboratories testing capabilities and there are proficiency testing programmes to maintain consistent quality amongst them and OVI. SANAS also audits many of these laboratories for ISO 17025 accreditation

DAFF has in place an approval system in place and in some cases have removed the approval of some laboratories for some capacities (e.g., virology at OVI, Queenstown and Lephalale VLs are not approved by DAFF),

Strengths:

- All laboratories have SOPs in place.
- The main laboratories have quality assurance staff and formal systems.

Weaknesses:

- Provincial laboratories do not yet have formal ISO accreditation for relevant official tests.

Recommendations:

- Finalise the process of ISO accreditation for relevant tests and laboratories.
- Ensure that the development of numerous small laboratories under local initiatives does not lead to a loss of quality in the delivery of timely and correct diagnostics for national programs and that they develop quality assurance.

II-3 Risk analysis *The authority and capability of the VS to base its risk management measures on risk assessment.*	Levels of advancement
	1. Risk management measures are not usually supported by risk assessment.
	2. The VS compile and maintain data but do not have the capability to carry out risk analysis. Some risk management measures are based on risk assessment.
	3. The VS compile and maintain data and have the capability to carry out risk analysis. The majority of risk management measures are based on risk assessment.
	4. The VS conduct risk analysis in compliance with relevant OIE standards, and base their risk management measures on the outcomes of risk assessment.
	5. The VS are consistent in basing sanitary measures on risk assessment, and in communicating their procedures and outcomes internationally, meeting all their OIE obligations (including WTO SPS Agreement obligations where applicable).

Terrestrial Code reference(s): Annexe 1

Evidence *(Appendix 6):* H6-10, P185-186,

Findings:

There is no Risk Analysis unit and specifically dedicated staff although epidemiology staff at national and sometimes at provincial levels are conducting some risk assessments.

Two veterinarians at national level have received short course training on risk analysis but have not followed up with further development in this area. For instance, no further training has been done at the provincial level or worked with resources at the university

Risk analyses were completed for the importation of pork from non-PRRS free countries and the importation of sable antelope from Zambia.

Risk analysis on AI management is currently implemented by an independent foreign consultancy on request of the Ostrich Business Chamber, which declared that the VS have been unable to provide such independent risk analysis for 7 years.

Risk analysis is lacking for most animal health programs, leading to the maintenance of unrealistic targets and strategies which are then not implemented (e.g. TB, brucellosis, anthrax, etc.).

The categorisation of different production systems is not based on multifactorial analysis, but only on historical socio-economic factor which only differentiate between so-called commercial, emerging, communal and the subsistence sectors. Such classification limits the ability to undertake risk analysis using well defined animal production systems to develop programme plans and survey designs.

Strengths:

- Clear understanding of risk analysis concept by some staff.
- Risk analysis is implemented for imports.

Weaknesses:

- No specific/designated staff or unit and defined methodology for risk analysis.
- AH programs/activities are not designed or based on risk analysis.
- Insufficient understanding of the different production systems when developing risk based animal health programs.

Recommendations:

- Develop a systematic approach to risk analysis with dedicated staff and unit at national level and expand training/skills to provincial level.
- Establish a comprehensive approach on typology (characterisation) of production systems based on a multifactorial analyse including species, breeds, numbers, feeding, land management, in-take and off-take, reproductions, inputs, self-consumption, marketing and sales, social background, workforce, education, etc…

II-4 Quarantine and border security *The authority and capability of the VS to prevent the entry and spread of diseases and other hazards of animals and animal products.*	Levels of advancement
	1. The VS cannot apply any type of quarantine or border security procedures for animals or animal products with their neighbouring countries or trading partners.
	2. The VS can establish and apply quarantine and border security procedures; however, these are generally based neither on international standards nor on a risk analysis.
	3. The VS can establish and apply quarantine and border security procedures based on international standards, but the procedures do not systematically address illegal activities [3] relating to the import of animals and animal products.
	4. The VS can establish and apply quarantine and border security procedures which systematically address legal pathways and illegal activities.
	5. The VS work with their neighbouring countries and trading partners to establish, apply and audit quarantine and border security procedures which systematically address all risks identified.

Terrestrial Code reference(s): Annexe 1

Evidence *(Appendix 6):* H3, H39-40, H76, H87-89, H93, H120-122, H142-143, H152, H164, H173-174, H183, H195, H197-198, H211, H214-216, H231, E3, E32-39, E43, E62-64, E66, E72, P54-69, P83-90, P157-180, P245-253, P288, P293-294, P298, P305, P352-354, P370-375

Findings:

Quarantine and border security (including import permit) is the only centralized function of the VS with a direct chain of command that, however, does not report to the Director of AH who is legally responsible for this function. It includes one central office "Inspection Services Directorate" under the Chief Directorate of Inspection and Quarantine Services, 16 land border inspection [out of 48 land crossing]; 4 of 12 airport and 4 seaports that allow agricultural products to cross. It includes also 2 governmental import quarantine stations at Kempton Park and Milnerton.

Veterinary para-professionals are working at border posts, using detailed procedures, forms and records, and are supported by veterinarians in the provinces on request of if needed, and directly audited by central level of VS.

Most borders of South Africa are fenced. However, in several areas the border fences were not in good repair and require a higher level of regular surveillance and maintenance.

During the mission, borders with all neighbouring countries, 14 border posts and the 2 import quarantines, were visited: 6 airports, and seaports, 6 land border inspection posts and 2 non agriculture border posts (where agriculture products or animal are not allowed to enter).

Some "border camps" were visited at borders with Mozambique and Zimbabwe. They were organised at local level to check the status of illegal movements of animals; it was not clear if these border camps were under the control of the national VS.

Inspectors benefit from appropriate physical resources including computers, as well as data management systems and continuing education.

Collaboration with customs and police is effective, as well as with the livestock theft units patrolling the border. Regular meetings are held between relevant institutions at provincial level and internationally with neighbouring countries.

[3] Illegal activities include attempts to gain entry for animals or animal products other than through legal entry points and/or using certification and/or other procedures not meeting the country's requirements.

Strengths:

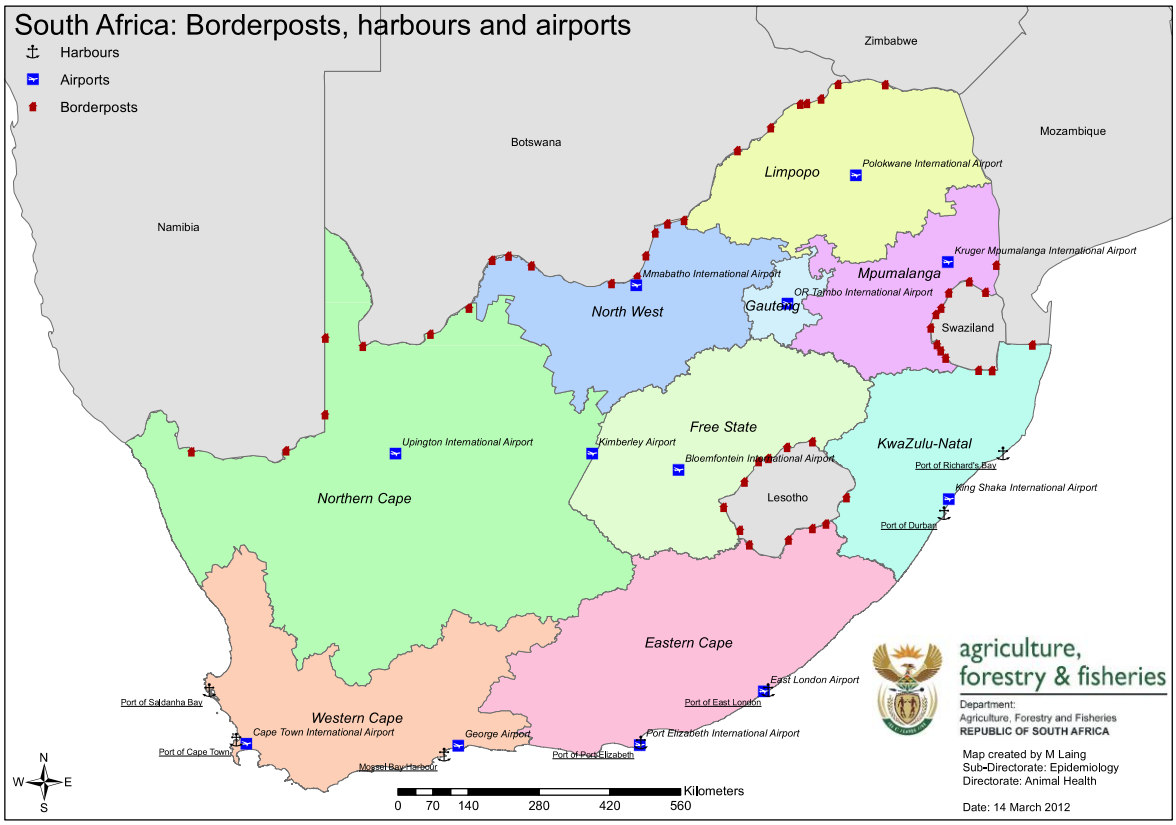
- Coherent procedures and systems are in place.

Weaknesses:

- Risks are more important with the Zimbabwe and Mozambique borders especially for the introduction of diseases by live animals. There is a need to clarify VS authority over some "camps".
- Lack of regular auditing of the system may lead to breaches and introduction of disease.
- Border inspection is under a different Chief Directorate than import and export certification and results in delayed procedures and flow of information.

Recommendations:

- Develop an internal or external audit system to secure this function of the VS.
- Improve procedures and develop interconnected data management between border inspection and import/export certification or modify national organisation chart.



II-5 Epidemiological surveillance and early detection *The authority and capability of the VS to determine, verify and report on the sanitary status of the animal populations, including wildlife, under their mandate.* **A. Passive epidemiological surveillance**	Levels of advancement
	1. The VS have no passive surveillance programme.
	2. The VS conduct passive surveillance for some relevant diseases and have the capacity to produce national reports on some diseases.
	3. The VS conduct passive surveillance in compliance with OIE standards for some relevant diseases at the national level through appropriate networks in the field, whereby samples from suspect cases are collected and sent for laboratory diagnosis with evidence of correct results obtained. The VS have a basic national disease reporting system.
	4. The VS conduct passive surveillance and report at the national level in compliance with OIE standards for most relevant diseases. Producers and other interested parties are aware of and comply with their obligation to report the suspicion and occurrence of notifiable diseases to the VS.
	5. The VS regularly report to producers and other interested parties and the international community (where applicable) on the findings of passive surveillance programmes.

Terrestrial Code reference(s): Annexe 1

Evidence *(Appendix 6):* H2, H12, H15-16, H74, H78, H101, H107, H117-118, H125-126, H132, H158, H162, H167, H179, H196, H208-209, H220, H222, E2, E17, E19-27, E44-46, P91-97, P111-121, P124-127, P134-139, P187-188, P297, P300-301, P348-349, P423

Findings:

There is an extensive list of controlled and notifiable diseases for 40 diseases. Under Act No. 35 of 1984 all veterinarians and stakeholders are required to report to the VS for the purpose of passive surveillance and early detection of these diseases. The list does not establish clear priorities between the diseases in relation to their significance and impact.

South Africa notifies regularly to OIE the results of passive surveillance and early detection.

Any suspicion of disease is supported by laboratory diagnostics. Reporting forms and data management are available. Dedicated and competent epidemiology staff at national and in most provinces (except Limpopo, North West and Free State) provide accurate data analysis including GIS, mapping, etc. In high FMD risk areas dip tank surveillance is in place.

However, there is no detailed procedure for reporting suspicions or confirmations or any specific program for most of these diseases. There is no official delegation to private veterinarians for the regular and systematic activities of passive surveillance, AHTs of the VS and private veterinarians do report their findings from which reports are supposed to be prepared and collated at district and provincial level. The lack of formal systematic programmes limits the accuracy and comprehensiveness of data on disease incidence and prevalence.

This activity relies mainly on the commitment and competence of the AHTs and veterinarians but is severely hampered by the break in the chain of command especially in provinces where the matrix system is in place.

The veterinary association (SAVA) has also established its own reporting system which functions on a voluntary basis for some of the controlled diseases (e.g., some poultry diseases). It is not connected with the VS reporting system.

Strengths:

- Commitment and competence of veterinarians and veterinary para-professionals in the field.
- Reporting procedures and data management.
- Dedicated epidemiological staff generally available at provincial level.

Weaknesses:

- No prioritized official detailed programs for priority diseases.
- Break in the chain of command has a very negative impact on passive surveillance and early detection in many of the highest risk areas and highest risk diseases (FMD).
- Lack of formal delegation to private veterinarians.
- Lack of involvement of stakeholders by the VS (e.g., training, awareness, joint programs, consultation).
- Lack of an effective animal identification system and animal census data.
- Separate information system developed by SAVA is not linked to VS.

Recommendations:

- Restore chain of command as a prerequisite for efficient and effective surveillance and early detection.
- Define priorities and detailed procedures for official programs for clearly identified prioritized diseases within the list of controlled and notifiable animal diseases.
- Establish official delegation for private veterinarians for these official programmes.
- Work with SAVA to establish joint programmes for non-prioritized diseases and facilitate exchange of information.
- Develop stakeholders' participation in this program through training, awareness, joint programmes, communication and consultation by VS.

II-5 Epidemiological surveillance and early detection *The authority and capability of the VS to determine, verify and report on the sanitary status of the animal populations, including wildlife, under their mandate.* B. Active epidemiological surveillance	Levels of advancement
	1. The VS have no active surveillance programme.
	2. The VS conduct active surveillance for some relevant diseases (of economic and zoonotic importance) but apply it only in a part of susceptible populations and/or do not update it regularly.
	3. The VS conduct active surveillance in compliance with scientific principles and OIE standards for some relevant diseases and apply it to all susceptible populations but do not update it regularly.
	4. The VS conduct active surveillance in compliance with scientific principles and OIE standards for some relevant diseases, apply it to all susceptible populations, update it regularly and report the results systematically.
	5. The VS conduct active surveillance for most or all relevant diseases and apply it to all susceptible populations. The surveillance programmes are evaluated and meet the country's OIE obligations.

Terrestrial Code reference(s): Annexe 1

Evidence *(Appendix 6):* H2, H5, H12, H15-16, H48-49, H74, H77-78, H101, H107, H117-118, H125-126, H132, H144, H148, H158, H162, H167, H196, H208-209, H219-220, H222, E2, E17, E44-46, E59, E69, P70-78, P111-121, P134-139, P187-188, P297, P348, P423

Findings:

Active surveillance programs have been developed and implemented for FMD (in non-free areas), AI (poultry and ostriches) and AHS. Active surveillance programs are developed at the national level with clearly detailed procedures for sampling, laboratory diagnostics, data management and reporting. Surveys are being conducted for other diseases according to VS.

The VS have in the past and are seeking in the future to use their programmes of active surviellance to recover official free status for several significant diseases, e.g., FMD, BSE, ASF, CSF, AI, PRRS, AHS zone. Previoulsy trading partners have recognised the validity of active surveillance programmes to demonstrate disease freedom in South Africa.

Strengths:

- Excellent skills and programmes for active surveillance (including publishing).

Weaknesses:

- Some active surveillance programmes are difficult to implement within the provinces where the chain of command has been internally broken.
- Implementation of AI active surveillance in poultry is not comprehensive and relies on the good will of stakeholders.
- In some areas the break in the chain of command has made the timely collection of active surveillance samples problematic.
- The tests used in FMD surveillance are not validated.

Recommendations:

- Ensure consistency of active surveillance programmes in all provinces by restoring the chain of command.

II-6 Emergency response *The authority and capability of the VS to respond rapidly to a sanitary emergency (such as a significant disease outbreak or food safety emergency).*	Levels of advancement
	1. The VS have no field network or established procedure to determine whether a sanitary emergency exists or the authority to declare such an emergency and respond appropriately.
	2. The VS have a field network and an established procedure to determine whether or not a sanitary emergency exists, but lack the necessary legal and financial support to respond appropriately.
	3. The VS have the legal framework and financial support to respond rapidly to sanitary emergencies, but the response is not coordinated through a chain of command. They may have national contingency plans for some exotic diseases but they are not updated/tested.
	4. The VS have an established procedure to make timely decisions on whether or not a sanitary emergency exists. The VS have the legal framework and financial support to respond rapidly to sanitary emergencies through a chain of command. They have national contingency plans for some exotic diseases that are regularly updated/tested.
	5. The VS have national contingency plans for all diseases of concern, including coordinated actions with relevant Competent Authorities, all producers and other interested parties through a chain of command. These are regularly updated, tested and audited

Terrestrial Code reference(s): Annexe 1

Evidence *(Appendix 6):* H2, H56-57, H77, H101, H106-107, H117-118, H125-126, H144, H146-148, H160, H162, H167, H179, H183, H208-209, H222, E2, E17, E19-27, E44-46, E59, P28-30, P91-97, P111-121, P124-127, P134-139, P257, P284, P296-297, P349

Findings:

Over that past years, the VS were able to get rid of exotic diseases such as PRRS and CSF.

On a more routine basis they are able to respond to outbreaks of major endemic diseases, such as anthrax, ASF and RVF.

FMD and AHS are currently handled through zoning (see CC IV.7); although when outbreaks have occurred the VS were able to adequately respond, the broken chain of command delayed the detection and response. In provinces applying the matrix system, it was reported that some AHTs were pulled away from the outbreak response teams to undertake generic extension agriculture activities on request of the municipal authority.

Recent AI outbreaks in ostriches were controlled through tightly managed and costly stamping out procedures followed by intensive surveillance and monitoring.

Compensation for impacted farmers is routine and timely. Although compensation levels and procedures are not always established in advance or in consultation with stakeholders, which has resulted in some legal action that may hamper the response capacity of the VS in the future.

Contingency plans, although referred to several times, were not made available to the mission, but were later submitted to OIE.

Strengths:

- In the case of an emergency the chain of command is clearly established as a national function within the legislation.
- Historically South Africa has provided a vigorous emergency response to outbreaks of significant diseases, especially against exotic disease.
- Regular meeting of “disaster management committees” at national and provincial levels (quarterly with police, DoH, etc).

Weaknesses:

- The break down in the chain of command leads to inconsistencies and lack of harmonisation between provinces (e.g., response to ASF in 2012). Despite the fact that the constitution indicates clearly that the VS authority is national during any outbreak, this authority cannot be applied and made fully functional and has delayed both detection and response in the field - this has led to loss of export markets.
- FMD re-emerging outbreaks and the difficulty in regaining internationally recognised free status is linked to the break in the chain of command between national level and some provinces.
- For some diseases emergency response has been implemented for decades without considering other prevention, control and eradication programs, e.g., anthrax, brucellosis and rabies.
- Contingency plans are not consistent between provinces, are not regularly updated, are not tested with simulation exercises and have not been communicated in advance to stakeholders.

Recommendations:

- Develop national disease and sector specific contingency plans supported by simulation exercises and consultation with stakeholders.
- Restore comprehensive chain of command of the VS, without separation between “emergency” and “routine” activities, as bio-hazards do not comply with such an approach (that is, what is routine today may become an emergency tomorrow, and people, habits and information channels cannot change overnight.).
- Clarify compensation policy and details.

II-7 Disease prevention, control and eradication *The authority and capability of the VS to actively perform actions to prevent, control or eradicate OIE listed diseases and/or to demonstrate that the country or a zone are free of relevant diseases.*	Levels of advancement
	1. The VS have no authority or capability to prevent, control or eradicate animal diseases.
	2. The VS implement prevention, control and eradication programmes for some diseases and/or in some areas with little or no scientific evaluation of their efficacy and efficiency.
	3. The VS implement prevention, control or eradication programmes for some diseases and/or in some areas with scientific evaluation of their efficacy and efficiency.
	4. The VS implement prevention, control or eradication programmes for all relevant diseases but with scientific evaluation of their efficacy and efficiency of some programmes.
	5. The VS implement prevention, control or eradication programmes for all relevant diseases with scientific evaluation of their efficacy and efficiency consistent with relevant OIE international standards.

Terrestrial Code reference(s): Annexe 1

Evidence *(Appendix 6):* H2, H12, H15-16, H50, H52, H56-57, H77, H84, H100-102, H106-108, H110, H125, H129, H132, H134-137, H141, H146, H155-156, H160, H162, H167, H176, H179-180, H205-206, H208-209, H222, E2, E17, E19, E44-46, E59, P51-53, P66-97, P111-121, P124-127, P134-139, P157-180, P185-186, P213,-214, P219-221, P257, P267, P275-277, P284, P290-291, P296-297, P300, P457, P462-463

Findings:

Animal health legislation (Animal Diseases Act of 1984, Act No. 35 of 1984) provides the authority to prevent, control and eradicate disease. However, the regulation in place relating to most diseases cannot be implemented as it is based on the rational analysis of the epidemiologic situation and available resources. With the exception of FMD, all controlled diseases, including the most important zoonoses (such as anthrax, brucellosis, TB, rabies) have national schemes for prevention and control under voluntary compliance and through market driven approaches, but without any compulsory implementation aimed at national prevention, control or eradication.

For instance:

- Anthrax vaccination is supposed to be implemented annually for all cattle nationally without any focus on target areas.
- TB and brucellosis were said to be almost eradicated from the whole country before the change in the organisation of the VS, with the consequent break in the chain of command; this was achieved through a compulsory national programme using private veterinarians under official delegation and a large number of state veterinary para-professionals, paid through the national budget. Currently these diseases are managed based on market requirements (e.g., annual testing for dairy herds required by the dairy industry) as a private good where private veterinarians conduct the testing without official delegation from the VS. As a consequence the prevalence of these diseases appears to be increasing.
- Rabies vaccination, supposedly compulsory, is implemented through a different channel and strategy by private or public staff without adequate coordination or analysis of effectiveness.
- A zoning approach is used for FMD control involving many tools such as fencing off infected areas including KNP, targeted vaccination, movement controls, serologic testing and clinical inspection at dip tanks.

Strengths:

- Export requirements and national market demands are strong drivers of voluntary control programmes for some diseases by the commercial sectors, e.g., TB and

brucellosis at dairies, and the creation of a private “poultry disease management agency”.

Weaknesses:

- No scientific evaluation is done for the efficacy or efficiency of disease programmes.
- Small farmers, communal areas and subsistence livestock owners cannot access systematically relevant disease prevention and controls.
- Public health concerns of the transmission of major zoonotic diseases are not adequately targeted.
- Global economic impact or eradication of some diseases cannot be addressed on a voluntary basis or within the limits of a market driven approach.

Recommendations:

- Prioritize disease control and eradication programs to be executed on a compulsory and coordinated national basis, including monitoring of efficacy and efficiency.

II-8 Food safety **A. Regulation, authorisation and inspection of establishments for production, processing and distribution of food of animal origin** *The authority and capability of the VS to establish and enforce sanitary standards for establishments that produce, process and distribute food of animal origin*	Levels of advancement
	1. Regulation, authorisation and inspection of relevant establishments are generally not undertaken in conformity with international standards.
	2. Regulation, authorisation and inspection of relevant establishments are undertaken in conformity with international standards in some of the major or selected premises (e.g. only at export premises).
	3. Regulation, authorisation and inspection of relevant establishments are undertaken in conformity with international standards in all premises supplying throughout the national market.
	4. Regulation, authorisation and inspection of relevant establishments (and coordination, as required) are undertaken in conformity with international standards for premises supplying the national and local markets.
	5. Regulation, authorisation and inspection of relevant establishments (and coordination, as required) are undertaken in conformity with international standards at all premises (including on-farm establishments).

Terrestrial Code reference(s): Annexe 1

Evidence *(Appendix 6):* H14, H19-20, H39, H47, H54, H60-61, H80, H91-92, H97, H123, H149-150, H163, H181-182, H188, H192-193, H199-204, H207, H210, E3, E28, E30-35, E37, P38, P40-50, P105-110, P198-199, P222-238, P322, P329-330, P332, P364, P431-433, P450-451

Findings:

The VS have the authority (Act 40: Meat Safety Act No. 40 of 2000), including clear regulations and procedures to authorise and inspect slaughtering facilities throughout the country as well as export facilities for processing food of animal origin.

Meat hygiene and inspection in slaughterhouses is audited by provincial VPH staff monthly based on a Hygiene Assessment System checklist (HAS) system, or a modified HAS system for rural abattoirs (less onerous).

Facilities processing and distributing food of animal origin only in the national market are under the mandate of the DoH though municipal environmental health officers, who apparently act at the local level without direct professional supervision by veterinarians or medical officers.

The VS registers all slaughterhouses by species and by categories, namely high and low through-put, and rural, export and non-export; there is also registration for export dairy and animal product processing facilities. Currently there are around 185 high through-put, 400 low through-put and 140 rural slaughterhouses. During the mission, 16 facilities covering of all types were visited. All facilities visited at all levels had appropriate infrastructure and process.

Their infrastructures as well as their processing are regularly audited by chief hygiene and meat inspectors of the provinces. The state veterinarians supervise and conduct comprehensive audits. Reports are provided and corrective measures are regularly implemented through a rating system.

Strengths:

- Comprehensive and detailed registration and auditing of facilities under the VS mandate.

Weaknesses:

- Facilities under the mandate of DoH do not benefit from the same quality of audits - this apparently creates a lower standard for the national consumer.

Recommendations:

- Harmonize auditing processes between national and export facilities, either through external coordination with the DoH or providing the VS with the mandate.

B. Ante and post mortem inspection at abattoirs and associated premises (e.g. meat boning/cutting establishments and rendering plants). *The authority and capability of the VS to implement and manage the inspection of animals destined for slaughter at abattoirs and associated premises, including for assuring meat hygiene and for the collection of information relevant to livestock diseases and zoonoses.*	Levels of advancement
	1. Ante- and post mortem inspection and collection of disease information (and coordination, as required) are generally not undertaken in conformity with international standards.
	2. Ante- and post mortem inspection and collection of disease information (and coordination, as required) are undertaken in conformity with international standards only at export premises.
	3. Ante- and post mortem inspection and collection of disease information (and coordination, as required) are undertaken in conformity with international standards for export premises and for major abattoirs producing meat for distribution throughout the national market.
	4. Ante- and post mortem inspection and collection of disease information (and coordination, as required) are undertaken in conformity with international standards for export premises and for all abattoirs producing meat for distribution in the national and local markets.
	5. Ante- and post mortem inspection and collection of disease information (and coordination, as required) are undertaken in conformity with international standards at all premises (including family and on farm slaughtering) and are subject to periodic audit of effectiveness.

Terrestrial Code reference(s): Annexe 1

Evidence *(Appendix 6):* H18-20, H47, H50, H54, H60-61, H80, H113, H190-191, H195, H197, H200, H207, E3, E28, E30-35, E37, P34-50, P98-110, P198-199, P222-238, P323, P331, P333, P424-430, P435-436, P438-446, P452

Findings:

Clear regulation and procedures for inspection are established (Act 40, Meat Safety Act of 2000) and its supporting regulations. .

On site slaughter primary inspection is implemented by private meat inspectors (the number could not be provided by DAFF), without direct supervision by veterinarians, except for the EU export abattoirs.

The meat inspectors are administratively registered by the provincial VS. They are not professionally registered as veterinary para-professionals by the SAVC but by the Human Health Professions Council. These staff are paid by the owner of the facility either directly or employed by one of the private inspection service companies (e.g., IMQAS, which is owned by the meat industry). These meat inspectors could be removed on request from the owner. One interview mentioned that the owner wanted “a nice guy” for inspection.

Secondary slaughter inspection is carried out by private veterinarians directly paid by the owners of the slaughter facility without official delegation by the VS (except for EU export abattoirs). This secondary inspection is not implemented systematically but only by request of the meat inspector.

Although regulation and procedures are generally implemented, from interviews in the field it appears that meat inspectors were clearly under commercial pressure, as were the private inspection companies for the purposes of competition. During some field visits it appeared that some meat inspectors were not qualified or committed to their task.

At all levels, data collection is implemented through standardised forms which would allow passive surveillance information to be collected - though, depending on the province and their chain of command, this data is not routinely transmitted.

Strengths:

- Clear regulation, procedures and requirements of human resources.

Weaknesses:

- Obvious lack of technical independence of this inspection at all levels.
- Break in the chain of command does not allow for reporting passive surveillance data.
- The salary level for the meat inspectors is considered too low to retain technically competent staff.

Recommendations:

- Reorganise the inspection system to fully ensure technical independence and a comprehensive reporting system at all levels through government employment, official delegation and relevant payment procedures (e.g., inspection fees).

C. Inspection of collection, processing and distribution of products of animal origin *The authority and capability of the VS to implement, manage and coordinate food safety measures on collection, processing and distribution of products of animals, including programmes for the prevention of specific food-borne zoonoses and general food safety programmes.*	Levels of advancement
	1. Implementation, management and coordination (as appropriate) are generally not undertaken in conformity with international standards.
	2. Implementation, management and coordination (as appropriate) are generally undertaken in conformity with international standards only for export purposes.
	3. Implementation, management and coordination (as appropriate) are generally undertaken in conformity with international standards only for export purposes and for products that are distributed throughout the national market.
	4. Implementation, management and coordination (as appropriate) are generally undertaken in conformity with international standards for export purposes and for products that are distributed throughout the national and local markets.
	5. Implementation, management and coordination (as appropriate) are undertaken in full conformity with international standards for products at all levels of distribution (including on-farm establishments).

[Note: This critical competency primarily refers to inspection of processed animal products and raw products other than meat (e.g. milk, honey etc.). It may in some countries be undertaken by an agency other than the VS.]

Terrestrial Code reference(s): Annexe 1

Evidence *(Appendix 6):* H124, H150, H200, H207, E3, E47-48, P254, P360-363, P438-446

Findings:

Provincial VPH staff audit hygiene and inspection only within export facilities. This usually occurs according to export requirements and is usually based on a Hygiene Assessment System checklist (HAS) system. Reports are available for the purposes of export certification and corrective measures are routinely implemented.

Processing and distribution of food of animal origin in the national market is under the mandate of the DoH and implemented by municipal environmental health officers, who apparently act at the local level without supervision by professionals such as veterinarians and medical officers.

From several interviews and on-site visits, it appears that facilities placed under the mandate of the DoH do not benefit from the same quality of audit and inspection.

DoH delivers the human health certificates of workers without any specific requirements/testing from the VS. The VS apparently do not control the existence of such workers' health certificates regularly.

Strengths:

- Comprehensive auditing process of inspection in export processing facilities.

Weaknesses:

- Inspections conducted under the mandate of DoH apparently do not benefit from the same quality as export audits which may lead to lesser food security for the national consumer.

Recommendations:

- Harmonize auditing processes of national and export inspection process, either through external coordination with the DoH or through moving the inspection mandate to the VS.

II-9 Veterinary medicines and biologicals *The authority and capability of the VS to regulate veterinary medicines and veterinary biologicals, in order to ensure their responsible and prudent use i.e. the marketing authorisation, registration, import, manufacture, quality control, export, labelling, advertising, distribution, sale (includes dispensing) and use (includes prescribing) of these products.*	Levels of advancement
	1. The VS cannot regulate veterinary medicines and veterinary biologicals.
	2. The VS have some capability to exercise regulatory and administrative control over veterinary medicines and veterinary biologicals in order to ensure their responsible and prudent use.
	3. The VS exercise regulatory and administrative control for most aspects related to the control over veterinary medicines and veterinary biologicals in order to ensure their responsible and prudent use.
	4. The VS exercise comprehensive and effective regulatory and administrative control of veterinary medicines and veterinary biologicals.
	5. The control systems are regularly audited, tested and updated when necessary.

Terrestrial Code reference(s): Annexe 1

Evidence *(Appendix 6):* E59, P267, P275-277, P316-320, P325-328, P342, P357, P416-421, P458

Findings:

Veterinary medicines are classified and registered in two categories; respectively “over-the-counter” which is under DAFF control, and “scheduled” under the control of DoH. The process of registration is formalised and described in Act 101,but it could not be easily presented by DAFF during the mission.

Over-the-counter products are regulated under Act 36 by DAFF within the Directorate of Agricultural Inputs Control. These medicines are distributed freely “over the counter” by retailers of agricultural products or pet shops. These products include all vitamins, internal and external anti-parasitacides, vaccines (except FMD) antibiotics (such as injectable tetracyclines and sulphonamides, oral tylosin) and all intramammary antibiotic products (except cephalosporins). Currently the Veterinary Clinical Committee is reviewing the status of intramammary products. Under Act 36 the registrar can cancel the registration and is under obligation to provide inspections.

Scheduled medicines regulated under Act 101 by DoH are distributed only under veterinary prescription, by pharmacists or veterinarians. The authorisation, registration and control ofthe manufacture of Act 101 veterinary medicines is governed by the DoH Medicines Control Council (MCC) and appropriate expert sub-committes, including the Veterinary Medicines Clinical Committee (which includes external expertise for review as needed) and requires satisfactory reviews of import and/or manufacturing protocols and details of product and the appropriate useage (schedule) is determined. The MCC has an inspectorate division that conducts inspections for manufacturing controls and complance under Act 36 for veterinary medicines (stock remedies) under DAFF, the details of the product dossier are reviewed by internal and external experts and the final report is used to support approval baased on SOPs. Inspection for Act 36 products is conducted by designated inspectorate staff.

During the field visits 7 agricultural shops (of approximately 800), 3 human pharmacies, and 17 private veterinarians were visited. All appeared to comply with the regulations. However, some interviews indicated that non-authorized veterinary medicines were occasionaly available in some provinces. In addition, concerns about the integrity of the cold chain for vaccines was raised, primarily regarding the agricultural shop retail distribution and the lack of instructions to end owners on the importance of controlling product temperature. In addition, one very well-known veterinarian produces and distributes “home-made” live vaccines without any authorization or quality controls resulting in reports of adverse reactions by farmers and an equine association.

From other interviews, it was indicated that the free distribution of over-the-counter products is believed to have led to high levels of resistance especially against tetracycline and ivermectin products.

From field visits the mission found that although some excellent farmers were effectively managing their use of veterinary products, many livestock owners did not understand or follow appropriate usage guidelines (with the exception of residues in milk, see CC II.10). Wide use of growth promoters and hormones (BST for milk, hormone implants in feedlots) was observed with the exception of specific voluntary market requirements (EU export or other specific protocols).

Although individual labelling of scheduled products (Act 101) includes all elements of the prescription (name of owner, animal/species, mode of use, withdrawal periods) these medicines were very often sold by veterinarians without regular visits to the farm (e.g., once every three years). This prescription/labelling approach does not allow trace back of veterinary medicine usage at animal or farm level (no compulsory filing of written prescription or registry at farm level or veterinary level).

In areas where the private veterinarians were inaccessible, public sector AHTs were not always allowed to dispense veterinary medicines - if so there was no clear cost recovery mechanism.

Strengths:

- Dedicated and competent OIE veterinary medicine focal point.
- Clear authority, regulation and procedures in place to ensure the safety, efficacy and quality of approved products.
- SAVC has developed and implemented standards of practice for extra-label use and compounded products.
- Review process is in place to ensure that all products available over-the-counter have clear, adequate labelling.

Weaknesses:

- The lack of control of distribution and usage of veterinary medicines and vaccines precipitates problems with residues and resistance, as well as of human health concerns. This may also restrict access to export markets.
- Some stakeholders indicated that the registration process and review is too long and costly and the interface between DoH and VS was difficult; although, this may only be an impression, as this could not be investigated in detail by the mission.
- Quality controls for vaccines produced by OBP were questioned by some stakeholders; however, issues with the cold chain in the retail distribution process may be the problem.
- There are no prudent use guidelines for the use antimicrobial products.

Recommendations:

- Reassess the legislation/policy for and status of over-the-counter products in order to limit misuse and side effects on both animal and public health; considering possibility of changing some products to prescription status.
- Reassess the prescription process for scheduled medicines in order to ensure that veterinarians have regular contact at farm level; consider removing authorisation for products of concern for public health (e.g., chloramphenicol) or export (e.g., hormones).
- Increase human resources at DAFF level for registration, control and development of new regulations on distribution and usage.
- Progressively develop a pharmacovigilance system to supplement the current adverse reaction reporting system.
- VS need to work with all interested parties to ensure that all veterinary medicines and biologicals are used optimally.

II-10 Residue testing	Levels of advancement
The capability of the VS to undertake residue testing programmes for veterinary medicines (e.g. antimicrobials and hormones), chemicals, pesticides, radionuclides, metals, etc.	1. No residue testing programme for animal products exists in the country.
	2. Some residue testing programme is performed but only for selected animal products for export.
	3. A comprehensive residue testing programme is performed for all animal products for export and some for domestic consumption.
	4. A comprehensive residue testing programme is performed for all animal products for export and domestic consumption.
	5. The residue testing programme is subject to routine quality assurance and regular evaluation.

Terrestrial Code reference(s): Annexe 1

Evidence *(Appendix 6):* H53, H63, E47, E48, P22-238, P422

Findings:

Residue testing is driven by export requirements (e.g., EU) and has been successfully implemented.

At national level residue testing is mainly market driven, for instance the dairy industry monitor residues with possible penalties for violations. Some red meat and poultry companies advertise their proprietary control of residues in marketed products.

The VS has just started limited national surveys to assess the residue situation but currently there are no regulations, penalties or controls in place.

VS have the capacity to access a wide range of residue testing in the national laboratory structure.

Strengths:

- Technical capacity and authority to undertake residue testing.

Weaknesses:

- No systematic enforcement of residue controls for the domestic market which creates a lower standard for the national consumer.
- The break in the chain of command may affect the implementation of any residue control programs.

Recommendations:

- Develop comprehensive official residue testing and control for the national market for purposes of public health of national consumers (avoiding double standards with export).

II-11 Animal feed safety	Levels of advancement
The authority and capability of the VS to regulate animal feed safety e.g. processing, handling, storage, distribution and use of both commercial and on-farm produced animal feed and feed ingredients.	1. The VS cannot regulate animal feed safety.
	2. The VS have some capability to exercise regulatory and administrative control over animal feed safety
	3. The VS exercise regulatory and administrative control for most aspects of animal feed safety
	4. The VS exercise comprehensive and effective regulatory and administrative control of animal feed safety.
	5. The control systems are regularly audited, tested and updated when necessary.

Terrestrial Code reference(s): Annexe 1

Evidence *(Appendix 6):* H28, H30-36, H121, H122, H149, H233, P259

Findings:

The Department of Agriculture, Forestry and Fisheries (DAFF) is responsible for regulating animal feeds and rendering plants in the Republic of South Africa. Animal feeds include Livestock Feed, Pet Food, Feed Additives and Raw materials. This mandate emanates from the Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act, 1947 (Act No. 36 of 1947). This Act aims to regulate the manufacture, supply, sale and advertisement of animal feed.

South Africa follows the pre-marketing registration model. Every feed including raw materials gets registered individually with the Registrar of Act 36. This model enables the Registrar to do risk assessment on the products before they enter the market. Coupled with this, Act 36 inspectors visit manufacturing facilities at least once per annum to take samples for analysis of nutrients and contaminants.

DAFF has started the process of reviewing the current legislation to strengthen the regulation of animal feeds. The proposed Fertilizer and Feeds Bill of 2013, when it comes into effect, will require strengthening implementation of a preventive risk-based system comprised of both regulatory and voluntary components designed to ensure continued production of safe and nutritious animal feed

There is a long standing ruminant to ruminant feeding ban in place.

Export certification for animal feeds is in place and has been delegated to private veterinarians under some conditions.

During the mission the experts did not have enough time to investigate the field implementation of controls in place.

Strengths:

- Animal feed safety is under the VS mandate.
- Laboratory capacity is available in the public sector.
- Legislation review is currently underway.

Weaknesses:

- There is no formal program of control of feed safety.

Recommendations:

- Identify priorities and needs and resources to set up feed safety control programmes.

II-12. Identification and traceability **A Animal identification and movement control** *The authority and capability of the VS, normally in coordination with producers and other interested parties, to identify animals under their mandate and trace their history, location and distribution for the purpose of animal disease control, food safety, or trade or any other legal requirements under the VS/OIE mandate.*	Levels of advancement
	1. The VS do not have the authority or the capability to identify animals or control their movements.
	2. The VS can identify some animals and control some movements, using traditional methods and/or actions designed and implemented to deal with a specific problem (e.g. to prevent robbery).
	3. The VS implement procedures for animal identification and movement control for specific animal subpopulations as required for disease control, in accordance with relevant international standards.
	4. The VS implement all relevant animal identification and movement control procedures, in accordance with relevant international standards.
	5. The VS carry out periodic audits of the effectiveness of their identification and movement control systems.

Terrestrial Code reference(s): Annexe 1

Evidence *(Appendix 6):* H62, H72, H83, H107, H116, H119, H145, H154, H157, H159, H185-186, E17, E67, E70, P70-78, P91-97, P111-121, P124-127, P134-139, P213-214, P219-221, P246-251, P301-304, P334-347, P350-351, P377

Findings:

There is a systematic individual permanent identification of animals only for stud animals, ostrich production, and racing or export horses.

Permanent group identification of ruminants is supposed to be made either by branding (hot or freeze) or tattoo with identification of the owner. Animals are rebranded when ownership is changed. The purpose of this identification system is primarily for theft prevention. This identification does not identify the geographic origin (e.g., province, district). Although this is 'compulsory' a significant proportion of animals are not identified.

A movement permit system is in place to transport animals only for the purpose of zoning (FMD, AHS, and ASF) and compartmentalisation (pigs, poultry). Movement of buffalo requires mandatory microchip identification throughout the country.

Specific generic branding of TB and brucellosis positive animals as well as animals originating from the FMD control zone is implemented (although the team did not observe this, it was reported that this was not done in exact conformity with the regulation).

Strengths:

- The authority for animal identification and movement controls is within the VS mandate and is implemented successfully in some instances.

Weaknesses:

- The regulation is not enforced for ruminants, nor is it enforced for TB and brucellosis positive animals.
- Lack of comprehensive national census of farms and animals
- Although often identified at field level by AHTs, most of small and communal farmers are not included in the registry of farmers at state or provincial level, which does not allow further animal identification.

Recommendations:

- Recognise all livestock owners or small farmers as part of the farming community and register them with a unique identification number recorded in a national database updated annually with the number of animals and different species by public AHTs or private veterinarians under official delegation.
- Explore needs and ways of permanent versus temporary and individual versus group identification systems including adequate resources for implementation in consultation with interested parties.

B. Identification and traceability of products of animal origin *The authority and capability of the VS, normally in coordination with producers and other interested parties, to identify and trace products of animal origin for the purpose of food safety, animal health or trade.*	Levels of advancement
	1. The VS do not have the authority or the capability to identify or trace products of animal origin.
	2. The VS can identify and trace some products of animal origin to deal with a specific problem (e.g. products originating from farms affected by a disease outbreak).
	3. The VS have implemented procedures to identify and trace some products of animal origin for food safety, animal health and trade purposes, in accordance with relevant international standards.
	4. The VS have implemented national programmes enabling them the identification and tracing of all products of animal origin, in accordance with relevant international standards.
	5. The VS periodically audit the effectiveness of their identification and traceability procedures.

Terrestrial Code reference(s): Annexe 1

Evidence *(Appendix 6):* P34-50, P222-236, P238, P252, P303, P437

Findings:

From the different meetings and interviews, authority and regulations in this domain could not be easily explained.

It was explained that legislation imposes traceability of products to the farm level; however, this does not seem possible in the absence of comprehensive registration of farmers or identification of animals.

Some authority lies in the Animal Identification 2002 (Act No. 6 of 2002), but apparently also in legislation for food safety, under DoH or others; the mission was not able to verify this.

However, it was mentioned during general meetings that the VS had been able to trace back some products in case of oubreaks. The mission was not provided with any evidence.

During the field mission, examples of food product traceability were found but were company based (proprietary market driven systems), such as:

- Identification of batches of milk coming from several identified farms;
- Identification of farmers on carcasses in some slaughterhouses;
- Identification of farmers on some processed and packaged meat products.

Strengths:

- Industry has developed some market driven systems of product traceability.

Weaknesses:

- Lack of clear mandate and legislation within the VS
- No national mechanism for traceability is currently in place.
- No database is available in VS to support traceability of products.

Recommendations:

- Explore development of traceability mechanisms for prioritised products in consultation with interested parties and trhough external coordination other relevant authorities (e.g DoH).

II-13 Animal welfare *The authority and capability of the VS to implement the animal welfare standards of the OIE as published in the Terrestrial Code.*	Levels of advancement
	1. There is no national legislation on animal welfare
	2. There is national animal welfare legislation for some sectors
	3. In conformity with OIE standards animal welfare is implemented for some sectors (e.g. for the export sector)
	4. Animal welfare is implemented in conformity with all relevant OIE standards.
	5. Animal welfare is implemented in conformity with all relevant OIE standards and programmes are subjected to regular audits.

Terrestrial Code reference(s): Annexe 1

Evidence *(Appendix 6):* H65-67; P11-23, P128-133, P171-181, P190-197, P217-218

Findings:

Regulations on animal welfare do exist but have not been updated and formatted in a very accessible maner (Performing Animals Act No. 35 of 1935; Animal protection Act No. 71 of 1962, SPCA Act No. 169 of 1993).

SPCA is a national organisation, present throughout the country.

During the mission meetings with animal welfare societies it was highlighted that there is no dedicated team at national or province level to enforce animal welfare legislation.

The existence of a livestock welfare committee was mentioned, but could not be investigated.

Data provided by SAVC lists 190 veterinarians working in animal welfare as their primary activity usually associated with NGOs or the SPCA. Their work could not be investigated.

Laboratory animal use is approved through an animal ethics committee for which there is a SANAS standard. However there is no legislative or regulatory backing (self-regulation)

Legislation of animal welfare is not out to the province level; some provinces do have some measures in place and work with the local SPCAs - primarily on the basis of an ethical concern

The Meat Safety Act does covers some aspects of welfare for animal transport.

Animal Welfare assistants are now also being registered by the SA Veterinary Council to undertake certain tasks in remote areas. However, no official contract was provided during the mission and their work could not be investigated.

Strengths:

- National awareness of animal welfare issues.
- Consultation with SPCA and other animal welfare NGOs.
- HAS covers humane slaughter as part of the audit process in abattoirs.

Weaknesses:

- No dedicated personnel at VS directly dedicated to animal welfare.
- No OIE focal point for animal welfare.
- Legislation and regulation for animal welfare is outdated.

Recommendations:

- Update legislation and regulation according to OIE animal welfare standards
- Take cognisance of new OIE animal welfare standards (beef production).

III.3 Fundamental component III: Interaction with interested parties

This component of the evaluation concerns the capability of the VS to collaborate with and involve stakeholders in the implementation of programmes and activities. It comprises seven critical competencies

Critical competencies:

Section III-1	**Communications**
Section III-2	**Consultation with interested parties**
Section III-3	**Official representation**
Section III-4	**Accreditation / Authorisation / Delegation**
Section III-5	**Veterinary Statutory Body (VSB)**
	A. VSB authority
	B. VSB capacity
Section III-6	**Participation of producers and stakeholders in joint programmes**

Terrestrial Code References:

Points 6, 7, 9 and 13 of Article 3.1.2. on Fundamental principles of quality: Veterinary legislation / General organisation / Procedures and standards / Communication.

Point 9 of Article 3.2.1. on General considerations.

Points 2 and 7 of Article 3.2.3. on Evaluation criteria for the organisational structure of the Veterinary Services.

Sub-point b) of Point 2 of Article 3.2.6. on Administrative resources: Communications.

Article 3.2.11. on Participation on OIE activities.

Article 3.2.12. on Evaluation of the veterinary statutory body.

Points 4, 7 and Sub-point g) of Point 9 of Article 3.2.14. on Administration details / Animal health and veterinary public health controls / Sources of independent scientific expertise.

Chapter 3.3. on Communication
Point 4 of Article 3.4.3. on General principles: Consultation.
Article 3.4.5. on Competent Authorities.
Article 3.4.6. on Veterinarians and veterinary para-professionals

III-1 Communication	Levels of advancement
The capability of the VS to keep interested parties informed, in a transparent, effective and timely manner, of VS activities and programmes, and of developments in animal health and food safety. This competency includes collaboration with relevant authorities, including other ministries and Competent Authorities, national agencies and decentralised institutions that share authority or have mutual interest in relevant areas	1. The VS have no mechanism in place to inform interested parties of VS activities and programmes.
	2. The VS have informal communication mechanisms.
	3. The VS maintain an official contact point for communication but it is not always up-to-date in providing information.
	4. The VS contact point for communication provides up-to-date information, accessible via the Internet and other appropriate channels, on activities and programmes.
	5. The VS have a well-developed communication plan, and actively and regularly circulate information to interested parties.

Terrestrial Code reference(s): Annexe 1

Evidence *(Appendix 6):* H11, H27, H71-80, H86-94, H108-109, H126-128, H164, H166-168, E63, P257, P266-269, P282, P288, P291, P307, P338, P366-367, P371, P376, P414-415, P429-430, P462-463

Findings:

The VS do not have a dedicated staff member for communications; communication is handled by a dedicated unit at the Departmental level. The national VS have an updated website where most of the information is available. Posters and leaflets about main animal and zoonotic diseases (rabies, FMD, RVF, avian influenza, lumpy skin disease) and animal health are widely available at all veterinary offices. Posters and leaflets are also available at border posts, slaughterhouse (hygiene protocols and disease awareness), and posters describing the VS mission. Some broadcasting is developed about different topics at provincial level for awareness campaigns.

Despite occasionally holding farmer field days, communications and awareness does not seem to be a focus for field staff, with the risk for this activity being taken away from VS control by extension services (and with unadapted/contradictory messages). During the mission interviews have shown that many communal farmers did not receive results or feedback from sero-surveillance testing undertaken and there was little awareness from farmers on the availability of compensation which would facilitate early detection;

Strengths:

- Quality and relative diversity of communication tools and channels.

Weaknesses:

- No dedicated staffing for communication at either national or provincial levels.
- Lack of communication tools dedicated to the communal farmer and small farmers for the purposes of animal or public health.
- VS do not leverage interaction with industry groups and private veterinarians for communication opportunities. Farmers' disease awareness is not generally addressed at dip tanks and other communal interactions.

Recommendations:

- Develop communication tools, media (e.g., mobile phone and social media) and strategies targeting small farmers with a dedicated unit/staff inside central VS, in order to keep VS control of extension delivery for AH and VPH matters.
- Avoid any transfer to agriculture extension services (increasing problems of chain of command notably with the matrix system) by involving private veterinarians and industry in extension activities for farmers through official delegaton of services.
- Communicate results of any testing results systematically and promptly to all farmers and livestock owners.

III-2 Consultation with interested parties *The capability of the VS to consult effectively with interested parties on VS activities and programmes, and on developments in animal health and food safety. This competency includes collaboration with relevant authorities, including other ministries and Competent Authorities, national agencies and decentralised institutions that share authority or have mutual interest in relevant areas*	Levels of advancement
	1. The VS have no mechanisms for consultation with interested parties.
	2. The VS maintain informal channels of consultation with interested parties.
	3. The VS maintain a formal consultation mechanism with interested parties.
	4. The VS regularly hold workshops and meetings with interested parties.
	5. The VS actively consult with and solicit feedback from interested parties regarding proposed and current activities and programmes, developments in animal health and food safety, interventions at the OIE (Codex Alimentarius Commission and WTO SPS Committee where applicable), and ways to improve their activities.

Terrestrial Code reference(s): Annexe 1

Evidence *(Appendix 6):* H107, H151, H194, H205-206, H212, H223-230, P453

Findings:

There is regular and formal consultation between VS and stakeholders at national level and consultation is compulsory when developing legislation.

There are several farmers and stakeholder organisations in SA representing the various productions sectors (see agenda of visits during the mission); some of them have provincial branches.

Stakeholders have taken the lead to organize consultation at least on the national level. The Animal Health Forum (AHF) intends to begin working at provincial level. Specific production sectors have organized consultation with the VS such as the poultry industry and horse industry to develop programmes and strategies. For instance:

- Animal Health Forum was started by industry and is not a joint industry-government committee for formal engagement. Rather, the Forum is of industry representatives meetings and then the Forum leadership can meet with government VS separately. However, this has become a useful mechanism for interaction with VS. Although mostly at the national level, provincial level organisation is underway. In 2007, the AHF wrote a comprehensive letter to the Minister outlining national animal health concerns and recommendations from an industry perspective; they report to date not having received a formal reply.
- A significant amount of mistrust and criticism exists on both sides e.g. FMD investigations, industry concerns of under-resourcing, vaccination supply issues.
- For the ASF outbreak in Mpumalanga and Gauteng in early 2012, SAPPO funded an incentive for farmers to allow their pigs to be stamped out, in consultation with the VS, but this arose informally and voluntarily from the SAPPO side.
- Could improve representation of the smaller, communal farmers, who are generally yet to be effectively organised to influence VS policy and programmes, especially at higher provincial or national levels. Currently most efforts are at the local level.
- Although consultation on AHS has been extensively developed for the export and racing industries it ignored the majority of equine owners throughout the country leading to the creation of Equilink AHS which is strongly opposed to the current AHS zoning.

Strengths:

- Animal Health Forum
- Regular consultation with specific groups (poultry, dairy, ostrich, feed, etc).
- Strong willingness by industry to engage and contribute (e.g., ASF compensation).

Weaknesses:

- Lack of regular formal consultation with stakeholders at all levels.
- Lack of small, communal/emerging farmer representation.
- Some level of mistrust and criticism between VS and industry stakeholders on both sides.

Recommendations:

- Formalise the Animal Health Forum as a joint committee with government and industry membership and include representation of all farmers groups (including smaller and communal farmers).
- Extend a similar consultation mechanism like the Animal Health Forum to the provincial level.

III-3 Official representation	Levels of advancement
The capability of the VS to regularly and actively participate in, coordinate and provide follow up on relevant meetings of regional and international organisations including the OIE (and Codex Alimentarius Commission and WTO SPS Committee where applicable).	1. The VS do not participate in or follow up on relevant meetings of regional or international organisations.
	2. The VS sporadically participate in relevant meetings and/or make a limited contribution.
	3. The VS actively participate4 in the majority of relevant meetings.
	4. The VS consult with interested parties and take into consideration their opinions in providing papers and making interventions in relevant meetings.
	5. The VS consult with interested parties to ensure that strategic issues are identified, to provide leadership and to ensure coordination among national delegations as part of their participation in relevant meetings.

Terrestrial Code reference(s): Annexe 1

Evidence *(Appendix 6):* H99, E60, E61, E73, P263-264

Findings:

South Africa is an active member of OIE, Codex, and SADC. The CVO is currently a member of the OIE council.

The horse industry, through the participation of one of its equine veterinarians, participated in changing the OIE Code legislation regarding AHS by providing technical information and context.

During the field visit, the Ostrich Business Chamber mentioned their collaboration with VS in order to develop appropriate changes in the OIE Code.

OVI serves as an OIE reference laboratory for a variety of significant diseases and also is a collaborating center for surveillance and control of animals diseases in Africa. OVF is the OIE collaborating center for training in integrated livestock and wildlife health and management.

Strengths:

- International meeting representation and participation and preparation for meetings.

Weaknesses:

- Lack of regular and formal consultation and communication with interested parties relating to participation in relevant international meetings and organisations.

Recommendations:

- SA could take a stronger role in animal and veterinary public health leadership and capacity building in SADC countries and Africa more generally.
- Develop formal and regular consultation/communication in this area.

[4] *Active participation* refers to preparation in advance of, and contributing during the meetings in question, including exploring common solutions and generating proposals and compromises for possible adoption.

III-4 Accreditation / authorisation / delegation *The authority and capability of the public sector of the VS to accredit / authorise / delegate the private sector (e.g. private veterinarians and laboratories), to carry out official tasks on its behalf.*	Levels of advancement
	1. The public sector of the VS has neither the authority nor the capability to accredit / authorise / delegate the private sector to carry out official tasks.
	2. The public sector of the VS has the authority and capability to accredit / authorise / delegate to the private sector, but there are no current accreditation / authorisation / delegation activities.
	3. The public sector of the VS develops accreditation / authorisation / delegation programmes for certain tasks, but these are not routinely reviewed.
	4. The public sector of the VS develops and implements accreditation / authorisation / delegation programmes, and these are routinely reviewed.
	5. The public sector of the VS carries out audits of its accreditation / authorisation / delegation programmes, in order to maintain the trust of their trading partners and interested parties.

Terrestrial Code reference(s): Annexe 1

Evidence *(Appendix 6):* H105, H110, H176, H178, H191, P239, P240-241,

Findings:

Official delegation has been formally implemented only for private veterinarians appointed to export slaughterhouses to control the on-line process. Although the secondary inspection of all slaughterhouses is done by private veterinarians, the contract is between them and the owner of the facility and not with the VS.

Thus currently there is virtually no official delegation of activities to the private veterinarians; although in the past official delegation was said to be very successful for TB and brucellosis control in commercial herds.

By law, all private veterinarians are supposed to report controlled and notifiable diseases for the purposes of surveillance and early detection. In some provinces, they are provided with free rabies vaccine to deliver to clients. Taking into account the high level of competency and commitment of the veterinarians the field, the mission found that this works relatively well, although it is not bound by official contract.

The provincial field VS work with the Society for the Prevention of Cruelty to Animals (SPCA) to deliver rabies field awareness and vaccination, and animal welfare and euthanasia services in communal areas.

Private laboratories have been officially accredited by DAFF for specific testing (see CC II.1B).

Strengths:

- An effective and efficient system of private laboratory accreditation by DAFF to undertake official tasks, which is replacing some testing previously undertaken by OVI.

Weaknesses:

- Poor use of private field veterinarians in delivering official VS tasks.
- Lack of VS capacity to audit such official delegation (lack of staff and methodology).

Recommendations:

- Develop formal official delegation to private veterinarians to increase manpower, increase efficiency and raise technical capacity of the VS.
- Implementation of activities for all official animal health programs could be delegated including projects for some service delivery to communal and small farmers.
- Develop delegation to private veterinarians for other official tasks such as auction inspections and meat hygiene and inspections should also be considered.

III-5 Veterinary Statutory Body (VSB) A. VSB authority *The VSB is an autonomous regulatory body for veterinarians and veterinary para-professionals.*	Levels of advancement
	1. There is no legislation establishing a VSB.
	2. The VSB regulates veterinarians only within certain sectors of the veterinary profession and/or does not systematically apply disciplinary measures.
	3. The VSB regulates veterinarians in all relevant sectors of the veterinary profession and applies disciplinary measures.
	4. The VSB regulates functions and competencies of veterinarians in all relevant sectors and veterinary para-professionals according to needs.
	5. The VSB regulates and applies disciplinary measures to veterinarians and veterinary para-professionals in all sectors throughout the country.

Terrestrial Code reference(s): Annexe 1

Evidence *(Appendix 6):* H64, H70, E65

Findings:

All veterinarians and veterinary para-professionals including veterinary nurses (except meat inspectors) are regulated by the Veterinary Council, under the Veterinary and Para-veterinary Act, which provides adequate regulatory authority and powers for this function. Veterinarians qualify by completing the approved curriculum and passing the final examinations – these are reviewed by 'modulators' from the SAVC to ensure quality is maintained.

All relevant categories of veterinarians and veterinary para-professionals are registered following examination by the Veterinary Council; this includes veterinarians, animal health technicians, veterinary technologists, veterinary nurses and animal welfare assistants. An exception is the meat inspectors who are registered by the Human Health Professions Council.

The Council works closely with educational institutions in developing and updating relevant curriculums. All subjects are evaluated approximately every 6 years. Recently the Council worked closely with the Onderstepoort Veterinary Faculty to update the undergraduate veterinary science course changing from a 7 year to a 6 year core-elective programme.

The SAVC receives 40-60 veterinary client complaints each year. These are screened by an investigation committee of four members with additional specialist input as needed. Approximately 10% of these cases progress to a full enquiry where a magistrate joins the committee. Disciplinary measures used include "writing a scientific article", "compulsory community service", fines of between 25,000 to 500,000R, and suspension or permanent loss of registration. In recent years there have been approximately 2 fines per year, 3 temporary suspensions and 4 continuing professional development obligations. Over the last decade there has only been one permanent removal from the veterinary register.

Foreign graduates are required to pass an examination to qualify to practice in South Africa (except graduates from mutually recognised univerisities).

Strengths:

- Registration requires the passing of a standard examination.
- CPD requirements are in place.
- Active disciplinary protocols with recent examples of implementation.

Weaknesses:

- Meat inspectors are not registered by the Veterinary Council.
- Other professionals in laboratories, even those with PhD qualification, are currently required to be registered by the VSB as veterinary para-professionals, which hampers the recruitment of highly qualified individuals to work in the laboratory system.
- The SAVC has not yet taken action against one veterinarian widely considered to be infringing on the established ethical and moral standards.

Recommendations:

- Follow through on plans to register meat inspectors under the Veterinary Council.
- Other non-veterinary professionals (university degrees) working in the laboratory should not be required to register with the SAVC.

B. VSB capacity *The capacity of the VSB to implement its functions and objectives in conformity with OIE standards.*	Levels of advancement
	1. The VSB has no capacity to implement its functions and objectives.
	2. The VSB has the functional capacity to implement its main objectives.
	3. The VSB is an independent representative organisation with the functional capacity to implement all of its objectives.
	4. The VSB has a transparent process of decision making and conforms to OIE standards.
	5. The financial and institutional management of the VSB is submitted to external auditing.

Terrestrial Code reference(s): Annexe 1

Evidence *(Appendix 6):* H64, H70, E65

Findings:

A national election is conducted for Council membership and public and private veterinarians are well represented.

The Veterinary Council relies on registration fees and draws an income of approximately 8 million rand (€ 800,000) per year. This seems sufficient for it to perform its functions adequately for veterinarians in terms of examination, disciplinary action and maintaining educational standards (undergraduate and CPD), as described in the previous critical competency.

Strengths:

- VSB is also supported by the existence of a well-structured veterinary association which represents the range of professional activities.
- Council membership is by national election.
- Good levels of funding and activity for regulatory functions.
- The SAVC is internationally recognised.

Weaknesses:

- The board election process is not allotted by geographic area or field of activity.
- The Council has difficulties updating the member registry regarding activity status.

Recommendations:

- Consider implementing a mechanism to ensure better representation by geographic area and domain of activity.
- Providing CE for veterinary para-professionals, even in private practices should be a duty of the veterinarians employing them (the organisation could be made by SAVC or SAVA).
- SAVC and SAVA should advocate for expanded involvement of private veterinarians in officially delegated activities and participate in the design of a comprehensive field veterinary network.

III-6 Participation of producers and other interested parties in joint programmes *The capability of the VS and producers and interested parties to formulate and implement joint programmes in regard to animal health and food safety. This competency includes collaboration with relevant authorities, including other ministries and Competent Authorities, national agencies and decentralised institutions that share authority or have mutual interest in relevant areas*	Levels of advancement
	1. Producers and other interested parties only comply and do not actively participate in programmes.
	2. Producers and other interested parties are informed of programmes and assist the VS to deliver the programme in the field.
	3. Producers and other interested parties are trained to participate in programmes and advise of needed improvements, and participate in early detection of diseases.
	4. Representatives of producers and other interested parties negotiate with the VS on the organisation and delivery of programmes.
	5. Producers and other interested parties are formally organised to participate in developing programmes in close collaboration with the VS.

Terrestrial Code reference(s): Annexe 1

Evidence *(Appendix 6):* H99, H185-186, H194, H212, P70-78, P453

Findings:

There are no official joint programmes that have been designed and implemented throughout the country or at provincial level for any disease. Whenever farmers are involved, it is only to provide support for animal handling or to pay for interventions - they do not specifically participate in the programmes and are not involved in their design.

Although it varies across the provinces, the following activities are implemented on a voluntary basis and with partial or total cost recovery:

- Commercial producers do pay for most vaccinations in most areas which are provided free to communal farmers (e.g. brucellosis (RB51), lumpy skin disease, anthrax / blackwater).
- Commercial cattle and game buffalo farmers are required to fund serological testing to gain movement permits in some areas.
- Clinical services in communal/emerging farming areas are generally provided free under the primary animal health care programme, with variable contributions related to supply of medicines, vaccines and services.

Intensive commercial producers (e.g., poultry and pigs) actively participate in compartmentalisation programmes jointly with government. They are responsible for costs for active surveillance and, in some provinces also pay an administration fee for government inspections for this activity (see critical competency IV.8).

During the ASF outbreak of early 2012 in Gauteng and Mpumalanga, the pig industry (SAPPO) voluntarily entered into an agreement with government to pay incentives for communal pig farmers to facilitate the stamping out that was undertaken by the provincial VS. In Mpumalanga, they also contributed resources to assist with the implementation of stamping out itself (equipment and labour).

Biosecurity fencing is required by government for certain livestock premises and is funded privately (e.g. both pig farms in the ASF control area and buffalo farms in the FMD protection zone must be electrically fenced).

Strengths:

- Individual commercial farmers fund most of the activities for animal health.

Weaknesses:

- Most of the animal health programs remain voluntary and do not support defined national animal health outcomes, such as eradication.

- Joint programmes, other than compartmentalisation, are not documented or formalised, and progress in an *ad hoc* and inconsistent manner (e.g. industry contribution to ASF outbreak).
- Nationally inconsistent approaches to joint programmes. The free delivery of services to communal farmers is not clearly defined or consistently applied and over-rides the aim of extension in AH and VPH.

Recommendations:

- Free delivery of services to communal farmers should be limited to zoonotic diseases and eradication programmes. Communal farmers should contribute to other clinical services and treatments in order to allow access to the same quality and range of services delivered by private veterinarians and to integrate them into sustainable livestock production.
- Develop interaction with industry and private veterinarians (through official delegation) to develop extension capability of the VS on AH and VPH, and avoid the transfer of such important activities to the extension services.
- Transform current AH "joint" programmes into compulsory prevention, control and eradication national programmes for prioritised diseases (e.g., TB, brucellosis).
- Develop clear joint programs with relevant groups of farmers/interested parties, such as those claiming to fight BVD or leucosis.

III.4 Fundamental component IV: Access to markets

This component of the evaluation concerns the authority and capability of the VS to provide support in order to access, expand and retain regional and international markets for animals and animal products. It comprises eight critical competencies.

Critical competencies:

Section IV-1	**Preparation of legislation and regulations**
Section IV-2	**Implementation of legislation and regulations and compliance thereof**
Section IV-3	**International harmonisation**
Section IV-4	**International certification**
Section IV-5	**Equivalence and other types of sanitary agreements**
Section IV-6	**Transparency**
Section IV-7	**Zoning**
Section IV-8	**Compartmentalisation**

Terrestrial Code References:

Points 6, 7 and 9 of Article 3.1.2. on Fundamental principles of quality: Veterinary legislation / General organisation / Procedures and standards.

Points 1 and 2 of Article 3.2.7. on Legislation and functional capabilities: Animal health, animal welfare and veterinary public health / Export/import inspection.

Points 1 and 3 of Article 3.2.8. on Animal health controls: Animal health status / National animal disease reporting systems.

Sub-point g) of Point 4 of Article 3.2.10. on Veterinary Services administration: Trade performance history.

Article 3.2.11. on Participation in OIE activities.

Points 6 and 10 of Article 3.2.14. on Veterinary legislation, regulations and functional capabilities / Membership of the OIE.

Chapter 3.4. on Veterinary legislation.

Chapter 4.3. on Zoning and compartmentalisation.

Chapter 4.4. on Application of compartmentalisation.

Chapter 5.1. on General obligations related to certification.

Chapter 5.2. on Certification procedures.

Chapter 5.3. on OIE procedures relevant to the Agreement on the Application of Sanitary and Phytosanitary Measures of the World Trade Organization.

Chapters 5.10. to 5.12. on Model international veterinary certificates.

IV-1 Preparation of legislation and regulations *The authority and capability of the VS to actively participate in the preparation of national legislation and regulations in domains that are under their mandate, in order to guarantee its quality with respect to principles of legal drafting and legal issues (internal quality) and its accessibility, acceptability, and technical, social and economical applicability (external quality). This competency includes collaboration with relevant authorities, including other ministries and Competent Authorities, national agencies and decentralised institutions that share authority or have mutual interest in relevant areas*	Levels of advancement
	1. The VS have neither the authority nor the capability to participate in the preparation of national legislation and regulations, which result in legislation that is lacking or is out-dated or of poor quality in most fields of VS activity.
	2. The VS have the authority and the capability to participate in the preparation of national legislation and regulations and can largely ensure their internal quality, but the legislation and regulations are often lacking in external quality.
	3. The VS have the authority and the capability to participate in the preparation of national legislation and regulations, with adequate internal and external quality in some fields of activity, but lack formal methodology to develop adequate national legislation and regulations regularly in all domains.
	4. The VS have the authority and the capability to participate in the preparation of national legislation and regulations, with a relevant formal methodology to ensure adequate internal and external quality, involving participation of interested parties in most fields of activity.
	5. The VS regularly evaluate and update their legislation and regulations to maintain relevance to evolving national and international contexts.

Terrestrial Code reference(s): Annexe 1

Evidence *(Appendix 6):* H37, H41-43, H60-67, H104, H165,

Findings:

The VS operate under a number of legislative acts with supporting regulations further detailed by Veterinary Procedural Notices. DAFF has the authority to establish regulations; procedures are established by the relevant Directorates.

Internal quality of legislation and regulation is satisfactory. However the VS have not enough dedicated professional legal staff to regularly update and reformat the necessary regulations, which has led in some instances to a lack of clarity and understanding.

External quality of new legislation and regulation is usually achieved by a process which includes consultation with stakeholders and publication/communication at different stages. However, some regulations on animal health are neither applicable nor relevant in the current context as they are not supported by the analysis of risk or resources needed (e.g., blanket vaccination, animal identification).

The list of legislation provided in the VS website is the following as:

- Performing Animals Protection Act, 1935, (Act No. 24 of 1935)
- Animals Protection Act, 1962 (Act No. 71 of 1962)
- Veterinary and Para-Veterinary Professions Act,1982, (Act No. 19 of 1982)
- Animal Diseases Act, 1984, (Act No. 35 of 1984)
- Meat Safety Act, 2000, (Act No. 40 of 2000)
- Animal Identification Act, 2002 (Act No. 6 of 2002)
- Animal Health Act, 2002 (Act No. 7 of 2002)
- Societies for the Prevention of Cruelty to Animals Act, 1993. (Act No. 169 of 1993)
- Liquor Products Act, 1989 (Act No. 60 of 1989)
- Agricultural Product Standard Act, 1990 (Act No. 119 of 1990)
- Fencing Act, 1963 (Act No. 31 of 1963)
- Onderstepoort Biological Products Incorporation Act, 1999 (Act No. 19 of 1999)
- Genetically Modified Organisms Act, 1997 (Act No. 15 of 1997)
- Agricultural Produce Agents Act, 1992, (Act No.12 of 1992)
- Marketing of Agricultural Products Act, 1996, (Act No. 47 of 1996)
- Agricultural Research Act, 1990, (Act No. 86 of 1990)

- Agricultural Pests Act, 1983 , (Act No. 36 of 1983)
- Animal Improvement Act, 1988 (Act No. 62 of 1988)
- Fertilizer, Farm Feeds, Agricultural Remedies and Stock Remedies Act, 1947 (Act No. 36 of 1947)

Strengths:

- Generally high quality of legislation and supporting regulations and procedures
- A process is in place to ensure internal and external quality.

Weaknesses:

- Insufficient dedicated legal human resources to update regularly.
- VS legislation and regulation are dispersed in a number of Acts making it often difficult to articulate in a comprehensive manner.

Recommendations:

- Review legislation and regulations to ensure consistency and clarity and to identify gaps.
- Animal health regulations should clearly reflect national priorities and strategies for official programs and be modified according to the evolution of disease programs.
- Veterinary public health legislation and regulations should be reviewed in order to improve coherence of activities which are currently shared between DAFF and DoH.

IV-2 Implementation of legislation and regulations and compliance thereof *The authority and capability of the VS to ensure compliance with legislation and regulations under the VS mandate.*	Levels of advancement
	1. The VS have no or very limited programmes or activities to ensure compliance with relevant legislation and regulations.
	2. The VS implement a programme or activities comprising inspection and verification of compliance with legislation and regulations and recording instances of non-compliance, but generally cannot or do not take further action in most relevant fields of activity.
	3. Veterinary legislation is generally implemented. As required, the VS have a power to take legal action / initiate prosecution in instances of non-compliance in most relevant fields of activity.
	4. Veterinary legislation is implemented in all domains of veterinary competence and the VS work to minimise instances of non-compliance.
	5. The compliance programme is regularly subjected to audit by the VS or external agencies.

Terrestrial Code reference(s): Annexe 1

Evidence *(Appendix 6):* H41-43, H60-67, H104

Findings:

During the field mission it was observed (through reports, field visits and interviews) that legislation is generally well implemented, as far as it is applicable; for instance, some animal health regulations are not supported by adequate risk analysis (e.g., blanket vaccination for anthrax) or resources (e.g., animal identification, animal welfare, traceability of products) and thus cannot be enforced, and rationally sometimes should not be (e.g. anthrax).

Most of the time when official programmes appear not to be implemented it is usually either because of the break in the chain of command (e.g., local authority do not allocate resources to implement the legislation as they do not consider it to be an obligation) or because those regulations do not provide for compulsory implementation (e.g., TB and brucellosis testing).

Strengths:

- When and wherever possible the VS implements legislation and apply penalties.
- Auditing process of slaughter facilities is designed to minimize instances of non-compliance.
- VS staff has authority for entry, inspection and seizure and can obtain the order of a magistrate and be supported by the police if necessary

Weaknesses:

- All the implementation of veterinary legislation, except for emergency response and import/export, is hampered by the break in the VS chain of command.
- There is no process to minimize instances of non-compliance in animal health in any sector, instances of non-compliance are not consolidated and analysed.
- All field staff involved in emergency response should fully understand their legal authority to act.
- Limited participation of law enforcement in most areas.

Recommendations:

- Develop data management to collate instances of non-compliance and analyse them.
- Restore the chain of command to ensure implementation of legislation and regulation throughout the country with mechanisms to ensure compliance in all sectors.

	Levels of advancement
IV-3 International harmonisation *The authority and capability of the VS to be active in the international harmonisation of regulations and sanitary measures and to ensure that the national legislation and regulations under their mandate take account of relevant international standards, as appropriate.*	1. National legislation, regulations and sanitary measures under the mandate of the VS do not take account of international standards.
	2. The VS are aware of gaps, inconsistencies or non-conformities in national legislation, regulations and sanitary measures as compared to international standards, but do not have the capability or authority to rectify the problems.
	3. The VS monitor the establishment of new and revised international standards, and periodically review national legislation, regulations and sanitary measures with the aim of harmonising them, as appropriate, with international standards, but do not actively comment on the draft standards of relevant intergovernmental organisations.
	4. The VS are active in reviewing and commenting on the draft standards of relevant intergovernmental organisations.
	5. The VS actively and regularly participate at the international level in the formulation, negotiation and adoption of international standards[5], and use the standards to harmonise national legislation, regulations and sanitary measures.

Terrestrial Code reference(s): Annexe 1

Evidence *(Appendix 6):* H45, E60, E61, E67

Findings:

Within SADC there is a general SPS agreement, recently finalised (SPS Annex to the Trade Protocol of SADC).

Bilateral annual engagements are developed with neighbouring countries, recently with Namibia and Botswana, Lesotho and Swaziland. Generally these are based on the OIE Codes, though they tend to adopt the higher standard between countries.

As South Africa is the port of entry for a large part of Africa, especially southern Africa, import procedures need to be harmonized to ensure that nothing is permitted to enter in transit that does not meet the South African standards.

SA participates actively in the review of OIE documents and includes consultation with interested parties for input on proposed changes to the Code. SA drafted the chapter on AHS for OIE consideration and have actively commented on chapters about EVA, AI, animal welfare and compartmentalisation.

Strengths:

- Strong and consultative inputs to the OIE Code.

Weaknesses:

- Lack of legal staff dedicated to VS legislation does not allow comprehensive harmonisation process and updating.

Recommendations:

- Appoint dedicated staff to a legal unit internal to the VS.

[5] A country could be active in international standard setting without actively pursuing national changes. The importance of this element is to promote national change.

IV-4 International certification[6] *The authority and capability of the VS to certify animals, animal products, services and processes under their mandate, in accordance with the national legislation and regulations, and international standards.*	Levels of advancement
	1. The VS have neither the authority nor the capability to certify animals, animal products, services or processes.
	2. The VS have the authority to certify certain animals, animal products, services and processes, but are not always in compliance with the national legislation and regulations and international standards.
	3. The VS develop and carry out certification programmes for certain animals, animal products, services and processes under their mandate in compliance with international standards.
	4. The VS develop and carry out all relevant certification programmes for any animals, animal products, services and processes under their mandate in compliance with international standards.
	5. The VS carry out audits of their certification programmes, in order to maintain national and international confidence in their system.

Terrestrial Code reference(s): Annexe 1

Evidence *(Appendix 6):* H4, H13, H37, H40, H46, H123, H134-136, H152-153, H161, H177, H182, H193, H195, H197, H216, H231-232, E47, E62, E66, E71, P54-65, P190-197, P222-238, P259-261, P391-400, P459-461

Findings:

VS of South Africa have gained international recognition of their certification by exporting to a variety of very demanding importing countries.

Export quarantine facilities (about 45) are privately managed or owned, out of which only one was visited during the field mission.

The Kenilworth horse export quarantine at Cape Town inside the AHS-free zone has in place excellent physical resources, procedures and records. Other private export quarantines facilities exist for all types of animals ranging from wildlife to reptiles and birds, including pets and livestock.

All exporting quarantine stations are under the control of a public veterinarian and are audited annually.

Strengths:

- International certification process is well established.
- Testing of ostriches for meat export to the EU (e.g., every group slaughtered is tested for AI and ND as part of the certification process).

Weaknesses:

- Lack of veterinarians in the field, both in animal and veterinary public health may limit the capacity of the VS to certify some products/activities (e.g., certification of testing or vaccination) and thus to expand their export market access.
- Having border inspection services in a different Chief Directorate from the import/export certification increases the number of procedures, delays the flow of information and thus the overall process of certification against the will and needs of the business.
- The broken chain of command imposes more procedures, than necessary within a national chain of command, to undertake international certification at provincial level.

Recommendations:

- Develop auditing of certification process.
- Improve procedures and develop interconnected data management between border inspection and import/export certification or revise national organisation chart.

[6] Certification procedures should be based on relevant OIE and Codex Alimentarius standards.

IV-5 Equivalence and other types of sanitary agreements *The authority and capability of the VS to negotiate, implement and maintain equivalence and other types of sanitary agreements with trading partners.*	Levels of advancement
	1. The VS have neither the authority nor the capability to negotiate or approve equivalence or other types of sanitary agreements with other countries.
	2. The VS have the authority to negotiate and approve equivalence and other types of sanitary agreements with trading partners, but no such agreements have been implemented.
	3. The VS have implemented equivalence and other types of sanitary agreements with trading partners on selected animals, animal products and processes.
	4. The VS actively pursue the development, implementation and maintenance of equivalence and other types of sanitary agreements with trading partners on all matters relevant to animals, animal products and processes under their mandate.
	5. The VS actively work with interested parties and take account of developments in international standards, in pursuing equivalence and other types of sanitary agreements with trading partners.

Terrestrial Code reference(s): Annexe 1

Evidence *(in Appendix 6):* H45-46, E60-61, E67

Findings:

The VS have several regional equivalence agreements in place, primarily within the SADC region.

Annual bilateral meetings with a number of trading partners, including Namibia (RSA/Namibia Joint Management Committee for Animal Health and Production Sub-Committee) and Botswana (Botswana/RSA Bilateral) discuss the sanitary status and work out conditions for the movement of animals and animal products between the countries.

Strengths:

- South Africa being export country, the VS are driven to seek such agreements.

Weaknesses:

- Lack of staff and design of the organisation at the central level may impact negatively on the development of such agreements.

Recommendations:

- Review the organisational chart and staffing of central VS.
- Seek feed back from interested parties.

IV-6 Transparency	Levels of advancement
The authority and capability of the VS to notify the OIE of its sanitary status and other relevant matters (and to notify the WTO SPS Committee where applicable), in accordance with established procedures.	1. The VS do not notify.
	2. The VS occasionally notify.
	3. The VS notify in compliance with the procedures established by these organisations.
	4. The VS regularly inform interested parties of changes in their regulations and decisions on the control of relevant diseases and of the country's sanitary status, and of changes in the regulations and sanitary status of other countries.
	5. The VS, in cooperation with their interested parties, carries out audits of their transparency procedures.

Terrestrial Code reference(s): Annexe 1

Evidence *(Appendix 6): see OIE WAHIS*

Findings:

The VS of South Africa have a long history of regular reporting to OIE with transparency which allows them to be one of the few Africa countries that can export to the most demanding international markets.

As far as they focus exports, interested parties are aware of changes in the sanitary status and related regulations and decisions. They communicate with VS on these matters.

Strengths:

- Long standing history of transparency.

Weaknesses:

- The lack of veterinarians in the field may hamper the quality, accuracy, sensitivity and timeliness of notification.

Recommendations:

- Develop audit function of the notification process.

IV-7 Zoning	Levels of advancement
The authority and capability of the VS to establish and maintain disease free zones, as necessary and in accordance with the criteria established by the OIE (and by the WTO SPS Agreement where applicable).	1. The VS cannot establish disease free zones.[7]
	2. As necessary, the VS can identify animal sub-populations with distinct health status suitable for zoning.
	3. The VS have implemented biosecurity measures that enable it to establish and maintain disease free zones for selected animals and animal products, as necessary.
	4. The VS collaborate with producers and other interested parties to define responsibilities and execute actions that enable it to establish and maintain disease free zones for selected animals and animal products, as necessary.
	5. The VS can demonstrate the scientific basis for any disease free zones and can gain recognition by trading partners that they meet the criteria established by the OIE (and by the WTO SPS Agreement where applicable).

Terrestrial Code reference(s): Annexe 1

Evidence *(Appendix 6):* H152, H154-156, P70-82, P287, P376,

Findings:

South Africa is one of the few countries with a long historical record of successful zoning. The VS have established zoning for FMD, AHS and ASF.

These established zones have been recognised by trading partners and are supported by regulation, procedures and adequate resources.

However, because of failures in zoning controls South Africa has sometimes lost its international trade status.

The broken chain of command is clearly a reason of these failures and on the length of time required to recover the status. In the short or medium term, the risk is that zoning might not be established or maintained properly which could lead this critical competency to be re-assessed at only level 2.

The national VS are responsible for monitoring and maintenance of a large number of fences separating their international borders with infected FMD countries (Zimbabwe and Mozambique), separating their own FMD protection and infected zones (i.e. Kruger National Park) and separating their vaccination from non-vaccination areas of the protection zone (red line fence).

Although there was some variability, these fences were being monitored and maintained by committed VS staff doing their best in challenging circumstances.

Difficulties were faced where fencing was inadequate, where illegal immigrants accessed the country, where local and neighbouring populations sought access to water sources and where flooding has regularly destroyed parts of fences. This presented an ongoing risk that infected animals such as stray buffalo and cattle from neighbouring infected countries and KNP could mix with South African cattle. Community awareness raising on the risks helped ensure that the VS were notified of buffaloes breaching fences and most were able to be shot before they entered areas with susceptible (unvaccinated) cattle. However, stray buffalo that remained unaccounted for were the likely cause of some recent FMD outbreaks. All properties with buffalo are required to adequately fenced, with electric fencing required in the FMD infected and protection zones and the Corridor disease controlled areas.

In some areas agency responsibility for fencing was unclear and/or being negotiated and there is room for greater efficiencies through clearer and more effective coordination of roles (i.e. with national parks authorities).

[7] If the VS has the authority and capability but chooses not to implement zoning, this CC should be recorded as “not applicable at this stage”

Strengths:

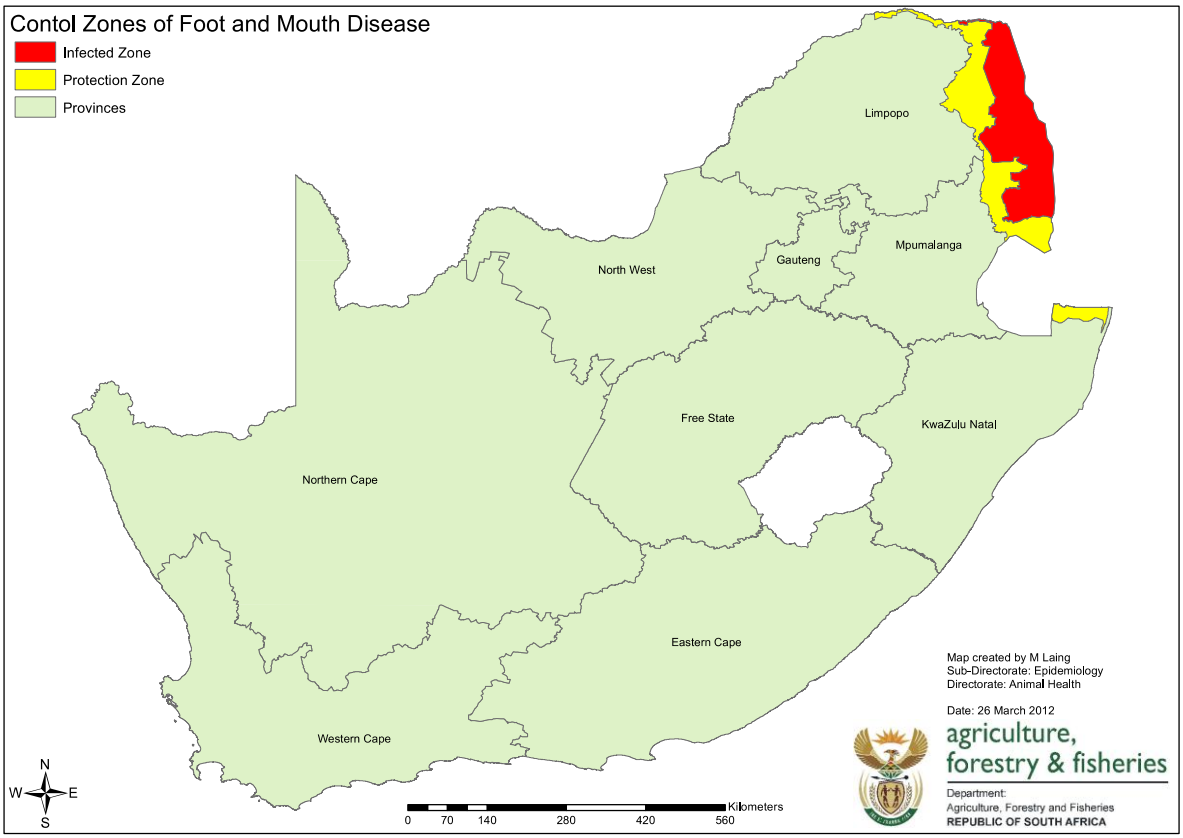
- Long history of successful zoning.

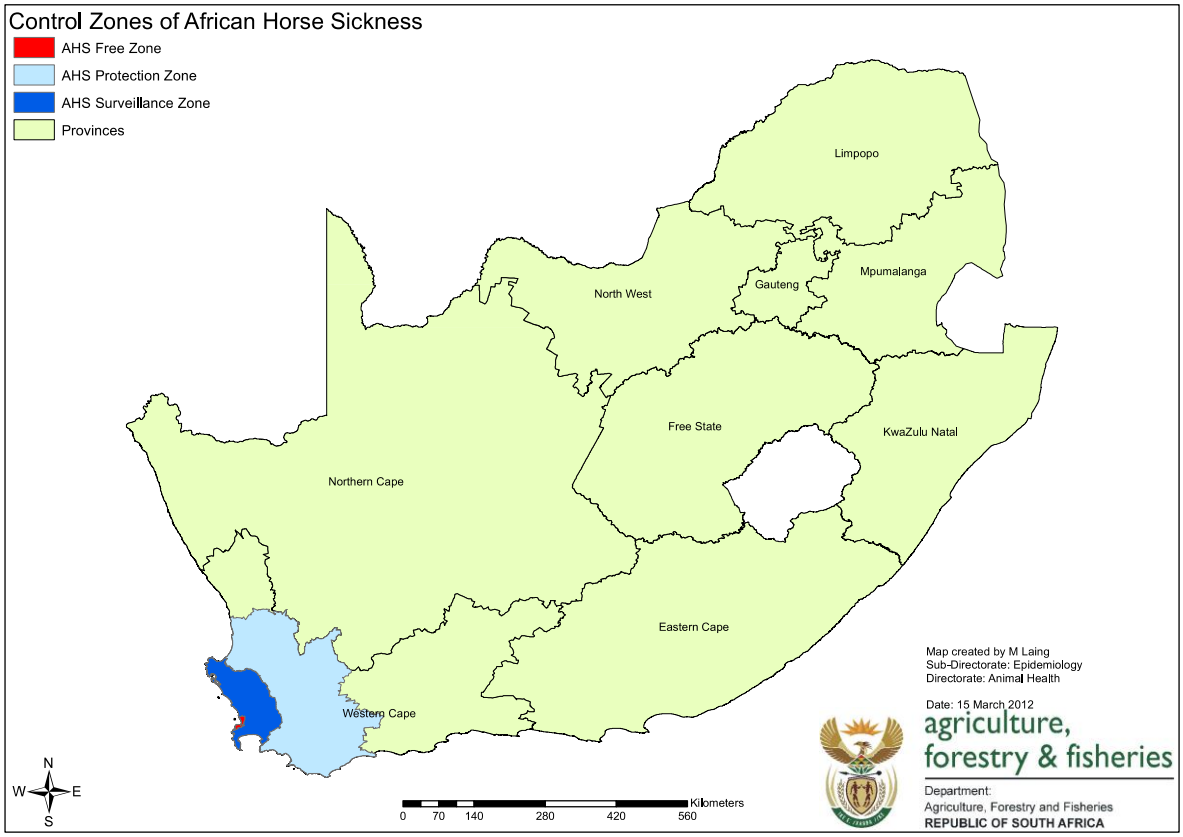
Weaknesses:

- Zoning failures have closed some important international markets.
- In response to the most recent FMD outbreak the VS were not able to expand the current zoning to include infected provinces to protect the free status of the rest of the country; this problem was precipitated by the break in the chain of command and resulted in the loss of all export markets for the whole country.
- Long standing zoning for AHS dedicated to export and racing was put in place with little consideration for the vast majority of horse owners - this has created resentment.
- The broken chain of command could lead zoning to be re-assessed to level 2 if management, coordination and response issues are not addressed.

Recommendations:

- Audit all zoning systems in order to maintain their efficacy, to ensure their acceptability among the majority of interested parties and to develop alternatives for disease control and eradication, if possible.
- Restore the chain of command of the VS.
- Clarify more effective VS coordination for fencing maintenance and/or monitoring, including with national parks, the private sector and provincial authorities.




Control Zones of African Horse Sickness
AHS Free Zone
AHS Protection Zone
AHS Surveillance Zone
Provinces
Limpopo
Mpumalanga
Gauteng
North West
Free State
KwaZulu Natal
Northern Cape
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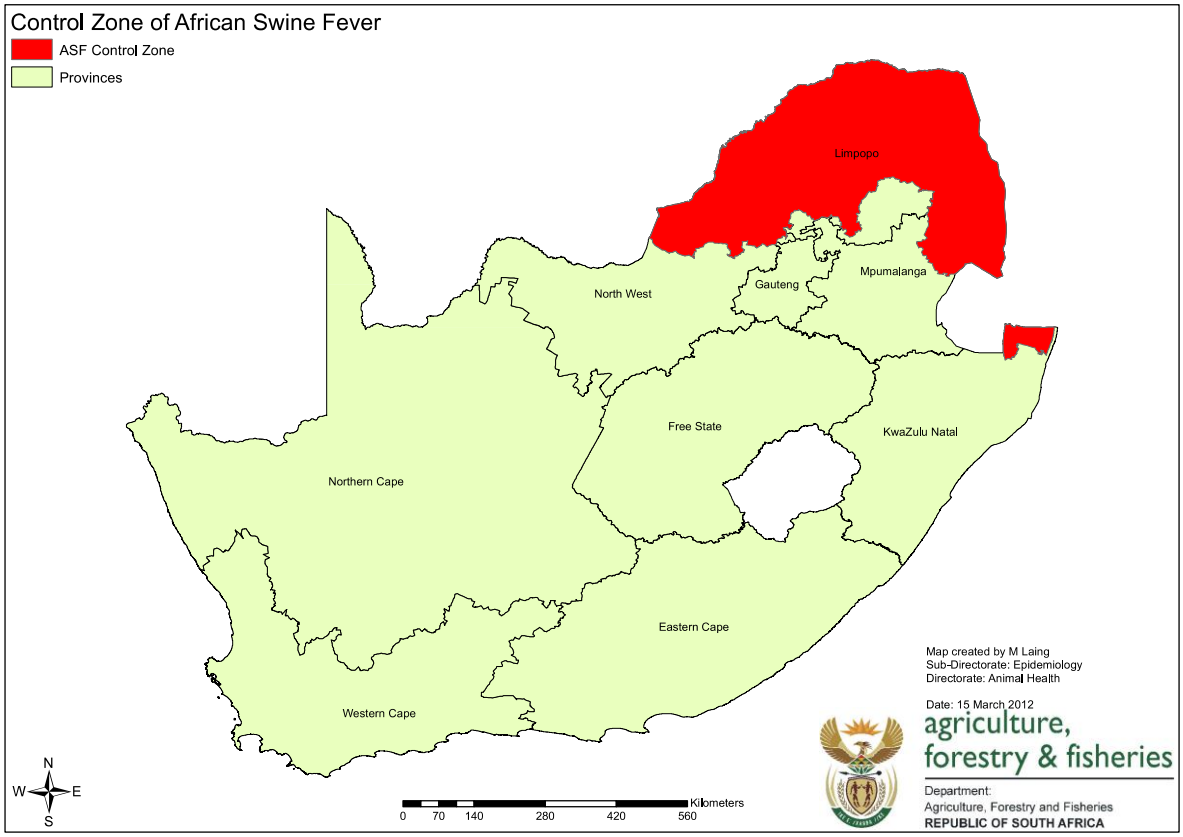
Map created by M Laing
Sub-Directorate: Epidemiology
Directorate: Animal Health
Date: 15 March 2012
agriculture, forestry & fisheries
Department:
Agriculture, Forestry and Fisheries
REPUBLIC OF SOUTH AFRICA


Control Zone of African Swine Fever
ASF Control Zone
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Gauteng
North West
Free State
KwaZulu Natal
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IV-8 Compartmentalisation *The authority and capability of the VS to establish and maintain disease free compartments as necessary and in accordance with the criteria established by the OIE (and by the WTO SPS Agreement where applicable).*	Levels of advancement
	1. The VS cannot establish disease free compartments.[8]
	2. As necessary, the VS can identify animal sub-populations with a distinct health status suitable for compartmentalisation.
	3. The VS ensure that biosecurity measures to be implemented enable it to establish and maintain disease free compartments for selected animals and animal products, as necessary.
	4. The VS collaborate with producers and other interested parties to define responsibilities and execute actions that enable it to establish and maintain disease free compartments for selected animals and animal products, as necessary.
	5. The VS can demonstrate the scientific basis for any disease free compartments and can gain recognition by other countries that they meet the criteria established by the OIE (and by the WTO SPS Agreement where applicable).

Terrestrial Code reference(s): Annexe 1

Evidence *(Appendix 6):* H46, H146, H171-172, H184-186

Findings:

The VS have already in 2005 developed compartmentalisation for the swine industry for CSF, PRRS, FMD and ASF. According to the VS, some trading partners have accepted this concept.

The VS are working to develop compartmentalisation for the poultry and ostrich industries for avian influenza. According to the VS, most SADC countries have accepted the concept for the export of chicken products and day old chicks.

Strengths:

- Compartmentalisation concept and procedures were developed in collaboration with interested parties.
- Namibia has entered into an agreement on swine compartments.

Weaknesses:

- Compartmentalisation that benefits only a limited number of private interested parties may be seen to divert resources from broader disease control activities that could benefit the overall health of the national herd/flock.

Recommendations:

- Ensure that compartmentalisation does not take resources (especially the limited available public veterinary resources at DAFF) away from broader animal disease control and eradication activities that benefit the entire country and is done is in consultation with the broader agricultural community rather than only the direct beneficiaries (i.e. public versus private good).

[8] If the VS has the authority and capability but chooses not to implement compartmentalization, this CC should be recorded as “not applicable at this stage”

PART IV: CONCLUSIONS

An OIE PVS evaluation of the VS of South Africa was requested by the high level political authority of the parliament, as the VS are being challenged by animal disease control issues and the loss of export markets over the last few years. The OIE PVS evaluation took place from 1st to 19th October 2012; it was implemented by a team of 4 OIE accredited experts and one OIE observer from the sub-regional office in Gaborone.

Results of the OIE PVS evaluation demonstrate that the high level of technical competencies and resources of the VS of South Africa have been incapacitated by the break in the chain of command between national and provincial levels; this problem is further exacerbated in some provinces where the "matrix" management system has been applied. In South Africa, with its diversity of livestock production systems, epidemiology, geography, politics, ethnicity and economic development, there is no cost effective and efficient alternative to rebuilding the VS other than by restoring the national chain of command for all domains of VS; such domains include animal health, veterinary public health (zoonoses, food and feed safety, residues and veterinary medicine controls) export/import, animal welfare and identification/traceability – this direct chain of command already exists for plant health, the police or military in South Africa. Any attempt to mitigate such a comprehensive approach will result in the loss of information,, adaptability, the timely response, efficacy and optimal use of resources.

The technical independence of the VS plays a key role in maintaining the credibility and access to export markets. However it is lacking the organisation for food safety inspection for the domestic market, where inspectors are under the direct or indirect influence of the owners of facilities or their representative organisations.

The VS quality has been generally maintained despite these fundamental deficiencies due to the high level of competence and personal commitment of both veterinarians and veterinary para-professionals, as well as the good level of physical and financial resources. Strong and experienced interpersonal relationships still fill many of the gaps created by the broken chain of command and the lack of technical independence; however, with the normal turn-over and retirement rates, the system will become less and less able to rely on this support.

Moreever, at all levels, veterinarians are spending their energy to compensate for the deficiencies of the chain of command, instead of being proactive in planning and auditing their programme.

At the central level, the VS does not have enough human resources to develop national planning and auditing systems (the ultimate level of advancement for most critical competencies of the OIE PVS evaluation). This also limits the development of Veterinary Public Health such as for residues control in the domestic market (currently operarting at a lower standard than for exports) and for control over the distribution and sale of veterinary medicines - to ensure their prudent use and to avoid resistance developing.

At provincial and district levels, veterinarians are busy working on outbreak investigations rather than implementing the AH or VPH official programmes as required by DAFF.

At the field level the lack of veterinarians with regular contact with livestock, and the limited on-site food inspection, challenges the ability of the VS to maintain certification for export markets; credible international certification will not be possible without testing,, surveillance activities and early warning will lack sensitivity and inspection will lack credibility. If these issues are not addressed double standards will develop between the consumers of importing countries and national consumers, and of veterinary services delivery between intensive commercial farmers, serviced by private veterinarians, and others (extensive commercial, emerging, communal, subsistence) with some access to public veterinary para-professionals.

Constrained by these organisational deficiencies, the VS have reduced ability to initiate and deliver control programmes: most programmes are now market-driven rather than oriented by

national and global public goods and/or interests. As a consequence, the VS, driven by export requirments, has tended to develop double standards in AH and VPH.

Greater emphasis should be placed on developing strategies and plans for VS activities in consultation with interested parties and private veterinarians. Building fences, creating disease free zones and compartments, organising compulsory community service and primary health care, defining progressive standards, may be useful temporary short terms solutions paving the way for sustainable development nationally. However, they should be planned carefully to avoid to entranch discriminatory situations.

The current and historical classification of livestock production systems into commercial, emerging, communal and subsistence categories does not allow the VS to develop coherent, effective and efficient strategies to tackle animal health and veterinary public health problems. Fundamentaly, the VS should change its paradigm to revise the definition of animal production systems based on a multi-factorial approach (e.g. including of species, breeds, numbers, feeding, land management, in-take, off-take, reproduction, inputs, self-consumption, sales, marketing, earnings, workforce, social background, eduction, etc).

To deal with these challenges, the VS will need additional resources. The national treasury should provide sufficient funding to allow the central level to develop planning and auditing activities. The major funding component should be derived from the current systems of direct payment or cost recovery from the private sectors; such an approach should utilise public or para-statal levies to ensure the technical independence of food safety inspection and compulsory implementation of national animal health programmes.

In order to persuade political authority and interested parties, the VS need to develop a strategic plan under the format requested by national authorities. The VS strategic plan should developed using scientific evidence (including veterinary, economic, social, etc) in the national public interest, rather than being merely market-driven. Data management capacity should be used to provide comparative, efficacy, efficiency and cost/benefit analyses.

The VS should consider requesting the support of OIE to develop a strategic plan, to help restore the chain of command, to ensure technical independence and/or to deploy veterinarians in VPH, to develop a comprehensive network of veterinarians in the field for AH to ensure access to all services for all farmers, and to develop and cost national strategic plans for animal and veterinary public health.

It is not suggested that the VS of South Africa needs a standard OIE PVS Gap analysis, as this is not directly relevant for such a sophisticated VS. However some elements of the methodology and some tools of in gap analysis would be helpful in the process of developing a strategic plan, establishing different strategies and to estimate the additional resources required.

The VS of South Africa, which are generally still of a very high standard, but they, are at the cross-roads between a bright future or a rapid decline.

The “bright future” requires restoration of the chain of command with unity of the different veterinary domains and the development of a comprehensive VS system including official delegation to private veterinarians. It will be necessary to develop improved interaction with all stakeholders and consumers, with priority given to addressing public good..

The “rapid decline” will result from continued fragmentation of the VS by local authorities or by function, activities will be market-driven by private interests, double standards will persist in animal and veterinary public health, and there will be a failure to adress public good.

The last words should be given to two veterinarians met during the mission. A private veterinarian acknowledged the need for the VS to “recognise all farmers as individuals” and a young public veterinarian defined its mission as “to be visible, in contact with farmers, to supervise directly the work of my veterinary para-professionals, to be available whatever is needed to find a solution”.

PART V: APPENDICES

Appendix 1: Terrestrial Code references for critical competencies

Critical Competences	Terrestrial Code references
I.1.A **I.1.B** **I.2.A** **I.2.B**	➢ Points 1-5 of Article 3.1.2. on Fundamental principles of quality: Professional judgement / Independence / Impartiality / Integrity / Objectivity. ➢ Points 7 and 14 of Article 3.1.2. on Fundamental principles of quality: General organisation / Human and financial resources. ➢ Article 3.2.5. on Evaluation criteria for human resources. ➢ Article 3.2.12. on Evaluation of the veterinary statutory body. ➢ Points 1-2 and 5 of Article 3.2.14. on Organisation and structure of Veterinary Services / National information on human resources / Laboratory services.
I.3	➢ Points 1, 7 and 14 of Article 3.1.2. on Fundamental principles of quality: Professional judgement / General organisation / Human and financial resources. ➢ Article 3.2.5. on Evaluation criteria for human resources. ➢ Sub-point d) of Point 4 of Article 3.2.10. on Veterinary Services administration: In-service training and development programme for staff. ➢ Point 9 of Article 3.2.14. on Performance assessment and audit programmes.
I.4	➢ Point 2 of Article 3.1.2. Fundamental principles of quality: Independence.
I.5	➢ Point 1 of Article 3.2.3. Evaluation criteria for the organisational structure of the Veterinary Services. ➢ Point 9 of Article 3.2.14. Performance assessment and audit programmes.
I.6.A **I.6.B**	➢ Points 6, 7 and 9 of Article 3.1.2. on Fundamental principles of quality: Veterinary legislation / General organisation / Procedures and standards. ➢ Article 3.2.2. on Scope. ➢ Points 1 and 2 of Article 3.2.3. on Evaluation criteria for the organisational structure of the Veterinary Services. ➢ Point 4 of Article 3.2.10. on Performance assessment and audit programmes: Veterinary Services administration.
I.7	➢ Point 2 of Article 3.2.4. on Evaluation criteria for quality system: “Where the Veterinary Services undergoing evaluation… than on the resource and infrastructural components of the services”. ➢ Points 2 and 3 of Article 3.2.6. on Evaluation criteria for material resources: Administrative / Technical. ➢ Point 3 of Article 3.2.10. on Performance assessment and audit programmes: Compliance. ➢ Point 4 of Article 3.2.14. on Administration details.
I.8 **I.9** **I.10**	➢ Points 6 and 14 of Article 3.1.2. on Fundamental principles of quality: Veterinary legislation / Human and financial resources. ➢ Point 1 of Article 3.2.6. on Evaluation criteria for material resources: Financial. ➢ Point 3 of Article 3.2.14. on Financial management information.
I.11	➢ Points 7, 11 and 14 of Article 3.1.2. on Fundamental principles of quality: General organisation / Documentation / Human and financial resources. ➢ Point 4 of Article 3.2.1. on General considerations. ➢ Point 1 of Article 3.2.2. on Scope. ➢ Article 3.2.6. on Evaluation criteria for material resources. ➢ Article 3.2.10. on Performance assessment and audit programmes.
II.1A **II.1B** **II.2**	➢ Point 9 of Article 3.1.2. Fundamental principles of quality: Procedures and standards. ➢ Point 1 of Article 3.2.4. Evaluation criteria for quality systems. ➢ Point 3 of Article 3.2.6. Evaluation criteria for material resources: Technical. ➢ Point 5 of Article 3.2.14. Laboratory services.
II.3	➢ Chapter 2.1. Import risk analysis
II.4	➢ Points 6 and 9 of Article 3.1.2. on Fundamental principles of quality: Veterinary legislation / Procedures and standards. ➢ Point 2 of Article 3.2.7. on Legislation and functional capabilities: Export/import inspection. ➢ Points 6 and 7 of Article 3.2.14. on Veterinary legislation, regulations and functional capabilities / Animal health and veterinary public health controls.

II.5.A **II.5.B**	➢ Points 6, 7 and 9 of Article 3.1.2. on Fundamental principles of quality: Veterinary legislation / General organisation / Procedures and standards. ➢ Points 1-3 of Article 3.2.8. on Animal health controls: Animal health status / Animal health control / National animal disease reporting systems. ➢ Sub-points a) i), ii) and iii) of Point 7 of Article 3.2.14. on Animal health: Description of and sample reference data from any national animal disease reporting system controlled and operated or coordinated by the Veterinary Services / Description of and sample reference data from other national animal disease reporting systems controlled and operated by other organisations which make data and results available to Veterinary Services / Description and relevant data of current official control programmes including:… or eradication programmes for specific diseases. ➢ Chapter 1.4. on Animal health surveillance. ➢ Chapter 1.5. on Surveillance for arthropod vectors of animal diseases.
II.6	➢ Points 6, 7 and 9 of Article 3.1.2. on Fundamental principles of quality: Veterinary legislation / General organisation / Procedures and standards. ➢ Points 1-3 of Article 3.2.8. on Animal health controls: Animal health status / Animal health control / National animal disease reporting systems. ➢ Sub-point a) of Point 7 of Article 3.2.14. on Animal health and veterinary public health controls: Animal health.
II.7	➢ Points 6, 7 and 9 of Article 3.1.2. on Fundamental principles of quality: Veterinary legislation / General organisation / Procedures and standards. ➢ Points 1-3 of Article 3.2.8. on Animal health controls: Animal health status / Animal health control / National animal disease reporting systems. ➢ Sub-point a) of Point 7 of Article 3.2.14. on Animal health and veterinary public health controls: Animal health. ➢ Chapter 4.12. on Disposal of dead animal.
II.8.A **II.8.B** **II.8.C**	➢ Points 6, 7 and 9 of Article 3.1.2. Fundamental principles of quality: Veterinary legislation / General organisation / Procedures and standards. ➢ Points 1-5 of Article 3.2.9. Veterinary public health controls: Food hygiene / Zoonoses / Chemical residue testing programmes / Veterinary medicines/ Integration between animal health controls and veterinary public health. ➢ Points 2, 6 and 7 of Article 3.2.14. National information on human resources / Veterinary legislation, regulations and functional capabilities / Animal health and veterinary public health controls. ➢ Article 3.4.12 on Human food production chain. ➢ Chapter 6.2. Control of biological hazards of animal health and public health importance through ante- and post-mortem meat inspection.
II.9	➢ Points 6 and 9 of Article 3.1.2. on Fundamental principles of quality: Veterinary legislation / Procedures and standards. ➢ Points 3 and 4 of Article 3.2.9. on Veterinary public health controls: Chemical residue testing programmes / Veterinary medicines. ➢ Sub-point a) ii) of Point 6 of Article 3.2.14. on Animal health and veterinary public health: Assessment of ability of Veterinary Services to enforce legislation. ➢ Chapters 6.6. to 6.10. on Antimicrobial resistance.
II.10	➢ Points 3 and 4 of Article 3.2.9. on Veterinary public health controls: Chemical residue testing programmes / Veterinary medicines. ➢ Sub-points b) iii) and iv) of Point 7 of Article 3.2.14. on Veterinary public health: Chemical residue testing programmes / Veterinary medicines.
II.11	➢ Chapter 6.3. on Control of hazards of animal health and public health importance in animal feed.
II.12.A **II.12.B**	➢ Point 6 of Article 3.1.2. on Fundamental principles of quality: Veterinary legislation. ➢ Chapter 4.1. on General principles on identification and traceability of live animals. ➢ Chapter 4.2. on Design and implementation of identification systems to achieve animal traceability.
II.13	➢ Section7 on Animal welfare
III.1	➢ Point 13 of Article 3.1.2. on Fundamental principles of quality: Communication. ➢ Sub-point b) of Point 2 of Article 3.2.6. on Administrative resources: Communications. ➢ Point 4 of Article 3.2.14. on Administration details. ➢ Chapter 3.3. on Communication.
III.2	➢ Point 13 of Article 3.1.2. on Fundamental principles of quality: Communication. ➢ Point 2 of Article 3.2.3. on Evaluation criteria for the organisational structure of the Veterinary Services. ➢ Point 4 and Sub-point g) of Point 9 of Article 3.2.14. on Administration details and on

	Sources of independent scientific expertise. ➢ Chapter 3.3. on Communication.
III.3	➢ Article 3.2.11. on Participation on OIE activities. ➢ Point 4 of Article 3.2.14. on Administration details.
III.4	➢ Points 6, 7 and 9 of Article 3.1.2. on Fundamental principles of quality: Veterinary legislation / General organisation / Procedures and standards. ➢ Point 7 of Article 3.2.3. on Evaluation criteria for the organisational structure of the Veterinary Services. ➢ Article 3.4.5. on Competent Authorities.
III.5.A **III.5.B**	➢ Point 6 of Article 3.1.2. on Fundamental principles of quality: Veterinary legislation. ➢ Point 9 of Article 3.2.1. on General considerations. ➢ Article 3.2.12. on Evaluation of the veterinary statutory body. ➢ Article 3.4.6. on Veterinarians and veterinary para-professionals.
III.6	➢ Points 6 and 13 of Article 3.1.2. on Fundamental principles of quality: Veterinary legislation / Communication. ➢ Points 2 and 7 of Article 3.2.3. on Evaluation criteria for the organisational structure of the Veterinary Services. ➢ Point 7 of Article 3.2.14. on Animal health and veterinary public health controls. ➢ Point 4 of Article 3.4.3. on General principles: Consultation.
IV.1	➢ Points 6, 7 and 9 of Article 3.1.2. on Fundamental principles of quality: Veterinary legislation / General organisation / Procedures and standards. ➢ Points 1 and 2 of Article 3.2.7. on Legislation and functional capabilities: Animal health, animal welfare and veterinary public health / Export/import inspection. ➢ Point 6 of Article 3.2.14. on Veterinary legislation, regulations and functional capabilities. ➢ Chapter 3.4. on Veterinary legislation.
IV.2	➢ Points 6, 7 and 9 of Article 3.1.2. on Fundamental principles of quality: Veterinary legislation / General organisation / Procedures and standards. ➢ Points 1 and 2 of Article 3.2.7. on Legislation and functional capabilities: Animal health, animal welfare and veterinary public health / Export/import inspection. ➢ Point 6 of Article 3.2.14. on Veterinary legislation, regulations and functional capabilities.
IV.3	➢ Point 6 of Article 3.1.2. on Fundamental principles of quality: Veterinary legislation. ➢ Article 3.2.11. on Participation in OIE activities. ➢ Points 6 and 10 of Article 3.2.14. on Veterinary legislation, regulations and functional capabilities / Membership of the OIE.
IV.4	➢ Points 6, 7 and 9 of Article 3.1.2. on Fundamental principles of quality: Veterinary legislation / General organisation / Procedures and standards. ➢ Point 2 of Article 3.2.7. on Legislation and functional capabilities: Export/import inspection. ➢ Sub-point b) of Point 6 of Article 3.2.14. on Veterinary legislation, regulations and functional capabilities: Export/import inspection. ➢ Chapter 5.2. on Certification procedures. ➢ Chapters 5.10. to 5.12. on Model international veterinary certificates.
IV.5	➢ Points 6 and 7 of Article 3.1.2. on Fundamental principles of quality: Veterinary legislation / General organisation. ➢ Sub-point g) of Point 4 of Article 3.2.10. on Veterinary Services administration: Trade performance history. ➢ Chapter 5.3. on OIE procedures relevant to the Agreement on the Application of Sanitary and Phytosanitary Measures of the World Trade Organization.
IV.6	➢ Point 6 of Article 3.1.2. on Fundamental principles of quality: Veterinary legislation. ➢ Points 1 and 3 of Article 3.2.8. on Animal health controls: Animal health status / National animal disease reporting systems. ➢ Chapter 5.1. on General obligations related to certification.
IV.7	➢ Point 6 of Article 3.1.2. on Fundamental principles of quality: Veterinary legislation. ➢ Chapter 4.3. on Zoning and compartmentalisation.
IV.8	➢ Point 6 of Article 3.1.2. on Fundamental principles of quality: Veterinary legislation. ➢ Chapter 4.3. on Zoning and compartmentalisation. ➢ Chapter 4.4. on Application of compartmentalisation.

Appendix 2: Glossary of terms

Terms defined in the Terrestrial Code that are used in this publication are reprinted here for ease of reference.

Animal

means a mammal, bird or bee.

Animal identification

means the combination of the identification and registration of an animal individually, with a unique identifier, or collectively by its epidemiological unit or group, with a unique group identifier.

Animal identification system

means the inclusion and linking of components such as identification of establishments/owners, the person(s) responsible for the animal(s), movements and other records with animal identification.

Animal welfare

means how an animal is coping with the conditions in which it lives. An animal is in a good state of welfare if (as indicated by scientific evidence) it is healthy, comfortable, well nourished, safe, able to express innate behaviour, and if it is not suffering from unpleasant states such as pain, fear and distress. Good animal welfare requires disease prevention and veterinary treatment, appropriate shelter, management, nutrition, humane handling and humane slaughter/killing. Animal welfare refers to the state of the animal; the treatment that an animal receives is covered by other terms such as animal care, animal husbandry, and humane treatment.

Border post

means any airport, or any port, railway station or road check-point open to international trade of commodities, where import veterinary inspections can be performed.

Compartment

means an animal subpopulation contained in one or more establishments under a common biosecurity management system with a distinct health status with respect to a specific disease or specific diseases for which required surveillance, control and biosecurity measures have been applied for the purposes of international trade.

Competent Authority

means the Veterinary Authority or other Governmental Authority of a Member having the responsibility and competence for ensuring or supervising the implementation of animal health and welfare measures, international veterinary certification and other standards and recommendations in the Terrestrial Code and the Aquatic Animal Health Code in the whole territory.

Disease

means the clinical and/or pathological manifestation of infection.

Emerging disease

means a new infection resulting from the evolution or change of an existing pathogenic agent, a known infection spreading to a new geographic area or population, or a previously unrecognized pathogenic agent or disease diagnosed for the first time and which has a significant impact on animal or public health.

Equivalence of sanitary measures

means the state wherein the sanitary measure(s) proposed by the exporting country as an alternative to those of the importing country, achieve(s) the same level of protection.

International veterinary certificate

means a certificate, issued in conformity with the provisions of Chapter 5.2., describing the animal health and/or public health requirements which are fulfilled by the exported commodities.

Laboratory

means a properly equipped institution staffed by technically competent personnel under the control of a specialist in veterinary diagnostic methods, who is responsible for the validity of the results. The Veterinary Authority approves and monitors such laboratories with regard to the diagnostic tests required for international trade.

Notifiable disease

means a disease listed by the Veterinary Authority, and that, as soon as detected or suspected, must be brought to the attention of this Authority, in accordance with national regulations.

Meat

means all edible parts of an animal.

Official control programme

means a programme which is approved, and managed or supervised by the Veterinary Authority of a country for the purpose of controlling a vector, pathogen or disease by specific measures applied throughout that country, or within a zone or compartment of that country.

Official Veterinarian

means a veterinarian authorised by the Veterinary Authority of the country to perform certain designated official tasks associated with animal health and/or public health and inspections of commodities and, when appropriate, to certify in conformity with the provisions of Chapters 5.1. and 5.2. of the Terrestrial Code.

Official veterinary control

means the operations whereby the Veterinary Services, knowing the location of the animals and after taking appropriate actions to identify their owner or responsible keeper, are able to apply appropriate animal health measures, as required. This does not exclude other responsibilities of the Veterinary Services e.g. food safety.

Risk analysis

means the process composed of hazard identification, risk assessment, risk management and risk communication.

Sanitary measure

means a measure, such as those described in various Chapters of the Terrestrial Code, destined to protect animal or human health or life within the territory of the OIE Member from risks arising from the entry, establishment and/or spread of a hazard.

Surveillance

means the systematic ongoing collection, collation, and analysis of information related to animal health and the timely dissemination of information to those who need to know so that action can be taken.

Terrestrial Code

means the OIE Terrestrial Animal Health Code.

Veterinarian

means a person registered or licensed by the relevant veterinary statutory body of a country to practice veterinary medicine/science in that country.

Veterinary Authority

means the Governmental Authority of an OIE Member, comprising veterinarians, other professionals and para-professionals, having the responsibility and competence for ensuring or supervising the implementation of animal health and welfare measures, international veterinary certification and other standards and recommendations in the Terrestrial Code in the whole territory.

(Veterinary) legislation

Means: the collection of specific legal instruments (primary and secondary legislation) required for the governance of the veterinary domain.

Veterinary para-professional

means a person who, for the purposes of the Terrestrial Code, is authorised by the veterinary statutory body to carry out certain designated tasks (dependent upon the category of veterinary para-professional) in a territory, and delegated to them under the responsibility and direction of a veterinarian. The tasks for each category of veterinary para-professional should be defined by the veterinary statutory body depending on qualifications and training, and according to need.

Veterinary Services

means the governmental and non-governmental organisations that implement animal health and welfare measures and other standards and recommendations in the Terrestrial Code and the OIE Aquatic Animal Health Code in the territory. The Veterinary Services are under the overall control and direction of the Veterinary Authority. Private sector organisations, veterinarians, veterinary paraprofessionals or aquatic animal health professionals are normally accredited or approved by the Veterinary Authority to deliver the delegated functions.

Veterinary statutory body

means an autonomous authority regulating veterinarians and veterinary para-professionals.

Wildlife

means feral animals, captive wild animals and wild animals.

Zoonosis

means any disease or infection which is naturally transmissible from animals to humans.

Appendix 3. List of persons met or interviewed

Date	Name	Position	Institution	Location
DAY ONE High Level Visit				
1/10/12	Dr Michael Modisane	Chief Veterinary Officer	DAFF	CVO office
	Pieter Mulder	Deputy Minister	Agriculture, Fisheries and Forestry	CVO office
Opening meeting				
1/10/12	Dr Mpho Maja	Director, Animal Health	Animal Health DAFF	Conference room, DAFF, Delpen, Pretoria
	Cornelia Gerstenberg	State Vet	DAFF	
	Caroline Gibbs	State Vet	DAFF	
	Leana Jane Van Rensburg	State Vet	DAFF	
	MJ Mamabolo	Acting Director Animal Production	DAFF	
	O Letuka	Deputy Director Disease Control in the Directorate of Animal Health	DAFF	
	S Meyer	Deputy Director Veterinary Hygiene	DAFF	
	Grietje De Klerk	State Vet	DAFF	
	Hannes Pienaar	State Vet	DAFF	
	Johan Dippenaar	State Vet	DAFF	
	Boitshoko Ntshabele	Director of Food Safety & Quality Assurance	DAFF	
	Willie Ungerer	Deputy Director of Epidemiology	DAFF	
	Mooketsa Ramasodi	Director of Inspection Services	DAFF	
	Luana Schoeman	Deputy Director of Imports / Exports Policy Unit	DAFF	
	AM Kalake	Director	Northern Cape	
	CL Mnqeta	Director	Eastern Cape	
	LS Madyibi	Director	North West	
	PS Kegakilwe	Director	North Cape	
	MJ De Bude	Chief Director	Gauteng	
	Tembile Songabe	Director, VPH	DAFF	
	Julia Reeves	State Vet Import/Export	DAFF	
	Jyotika Rajput	State Vet Import/Export	DAFF	
	ML Moroe Rulashe	State Vet	DAFF	
	Zarina Motala	State Vet	DAFF	
	Princess Moswa-kato	State Vet	DAFF	
	Tumi Motsisi Mehlape	State Vet (import/export)	DAFF	
	Romona Naidoo	State Vet (import/export)	DAFF	
	Jacolette Du Plessis	State Vet (disease control)	DAFF	
	Pieter Koen	Dep Director, Animal Health	Western Cape	
	Lucas Mampane	Director	Mpumalanga DAFF	
	Ben du Plessis	Dep Director Animal Health	Mpumalanga	
	MV Mnisi	Director Animal Health		
	MA Bronkhorst	State Vet	DAFF	

Directorate – Veterinary Public Health				
1/10/12	Siegfried Meyer	Deputy Director, Hygiene, VPH	DAFF	Conference room
	Tembile Songabe	Director, Vet Public Health	DAFF	
	Mmalencoe Lydia Moroe-Rulashe	Residues Monitoring and Control	DAFF	
	Marthiens Wolhuter	State Veterinarian, VPH	DAFF	
	Kudaalwashe Magwedere	State Vet, VPH	DAFF	
Directorate – Inspection and Quarantine Services				
1/10/12	Ndnhuho Luvhimbi	Inspection Services	DAFF	Conference Room
	Moketsa Ramasodi	Director	DAFF	
Directorate – Act 36				
1/10/12	Ernest Mokantla	Agricultural Inputs	DAFF	Conference Room
Directorate – Food Safety & Quality Assurance				
1/10/12	Boitshoko Ntshabele	Director of Food Safety and Quality Assurance	DAFF	Conference Room
Directorate – Animal Production				
1/10/12	MJ Mamabolo	Acting Director Animal Production	DAFF	Conference Room
Directorate – Animal Health				
1/10/12	Dr Mpho Maja	Director, Animal Health	Animal Health DAFF	Conference room, DAFF, Delpen, Pretoria
	Cornelia Gerstenberg	State Vet	DAFF	
	O Letuka	Deputy Director Disease Control (Directorate of Animal Health)	DAFF	
	Willie Ungerer	Deputy Director of Epidemiology	DAFF	
	Luana Schoeman	Deputy Director of Imports / Exports Policy Unit	DAFF	
	MA Bronkhorst	State Vet	DAFF	
DAY TWO **Onderstepoort Veterinary Institute and Onderstepoort Biological Products**				
2/10/12	Antony Musoke		OVI	OVI conf room
	Theresa Smit		OBP	
	Jeanette Heath		OBP	
	Livio Heath		OVI	
	Rahana Dworlea		OVI	
	Leanna Janse Van Rensburg		DAFF	
	Sumari Potgieter		DAFF	
	Marietta Bronkhorst		DAFF	
	Phemelo Kegakilwe		Northern Cape	
	Cornelia Gerstenberg		DAFF	
	Mpho Maja		DAFF	
	Steven Cornelius		OBP	
	Jacob Modumo		OBP	
	Claude Sabeta		OVI	
	Phelix Maijoa		OVI	
	DH Du Plessis		OVI	
	Abdella Latif		OVI	
	Matsobane Gololo		OBP	
	Mpume Ramutle		OBP	
	PM Pieterson		OBP	
	Khalid Guffar		OBP	
	Raynard McDonald		OBP	
	Willie Ungerer		DAFF	

ONDERSPOORT VETERINARY FACULTY				
2/10/12	Mpho Maja	Director of Animal Health	DAFF	Arnold Theiler Building, UP offices
	L Prozesky		UP	
	Pete Irons		UP - Production Animal Studies	
	Sumari Potgieter	State Vet	DAFF	
	Phemelo Kegakilwe	Director of Veterinary Services	Northern Cape Veterinary Services	
	Marietta Bronkhorst	State Vet	DAFF	
	Leana Janse van Rensburg	State Vet	DAFF	
	Alan Guthrie		ARC, UP	
	Johan Schoeman		CACS, UP	
	Moritz van Vurren		DVTD, UP	
	Darrell Abernethy		DVTD, UP	
	HM Terblanche		UP Dep. Dean: T&L	
	Koos Coetzer		UP Dep. Dean: Postgrad studies	
	Herman Groenwald		Up Head: Anat & Phys	
	Cornelia Gerstenberg	Professional Disease Control	DAFF	
	Mathew Nyirenda		NWU	
	Lebo Mosei		NWU	
Gauteng Provincial Veterinary Services				
2/10/12	Mpho Maja		DAFF	Vredhuis office, Pretoria
	Phemelo Kegakilwe		DAFF	
	Daries Venter		Gauteng	
	Wynton Rabolao		Gauteng	
	Ambrose Kyandi		Gauteng	
	Johan Walters		Gauteng	
	Noluvuvo Magadla		Gauteng	
	Dietana Nemudzivhadi		Gauteng	
	Reuben Govendir		Gauteng	
	Cornelia Gerstenberg		DAFF	
	Malcolm De Bude		Gauteng	
	Alan M Kalake		Gauteng	
Farmers Organisations / Associations				
3/10/12	Dr Langa Simela		NERPO (National Emergent Red Meat Producers Organisation)	Grasdak at Onderstepoort
	Dr Gerhard Neethling		RMAA (Red Meat Abattoir Asso.)	
	Michelle DeLange		RMIF (Red Meat Industry Forum)	
	Mr Gerhard Schutte		RMPO (Red Meat Producers Orga.)	
	Mr Dave Ford Dr Shaun Morris Dr Gerhard Neethling		SAFA (SA Feedlot Asso.)	
	David Hughes Dr Charlotte Ncuna Dr Greg Celliers		SAPA (SA Poultry Association)	
	S Streichen P Vervoort		SAPPO (SA Pork Producers Orga.)	
	P Vervoort		AH Forum	

	Mr Herman Barnad	Manager	WRSA (Wildlfe Ranching SA)	
	Mr Dawie Maree		AgriSA	
	Dr Adele Faul		PFI / Renderers Ass	
	Dr JH du Preez		MPO	
	Ms H Pheiffer		MPO	
	Dr GC Dry		WRSA	
	Celia Abolnic		SAPA, UP	
	Dr Grietjie de Klerk		DAFF	
	Dr Hannes Pienaar		DAFF	
	Dr Willie Ungerer		DAFF	
	Dr Julia Reeves		DAFF	
	Phemelo Kegakilwe		N. Cape Vet / DAFF	
	Jacolette du Plessis		DAFF	
	MJ Mamabolo		DAFF	
	Zarina Motala		DAFF	
	Luana Schoeman		DAFF	
	Marietta Bronkhorst		DAFF	
STAKEHOLDERS				
3/10/12	Mr Dawei Maree		AgriSA	Grasdak at Onderstepoort
	David Wolpert		AMIE (Asso. of Meat Importers and Exporters	
	Andries Venter Marcelle Merdith		NSPCA (National Society for Prevention of Cruelty to Animals)	
	Seymour Talpert		BRM Brands AMIE	
	Dr Adele Faul		PFIA (Pet Food Industry Asso.)	
	Dr. Emily Lane		National Zoological gardens of SA (Pretoria)	
	Prof Gareth Bath		Representing Livestock Welfare Coordinating Committee & Small Stock Health Advisory Body	
	Peter Gibson		RSA (Racing SA)	
	Rudy van der westhuizen		SAMIC (SA Meat Industry Company)	
	L Vibogin		IMQAS	
	RB Prentis		SA Reudeuqas Ass. Comchew	
	P Vervoort		Animal Health Forum	
SOUTH AFRICAN VETERINARY COUNCIL (SAVC)				
3/10/12	Mrs Lynette Havinga		SAVC	Grasdak at Onderstepoort
	Dr Anne P De Vos		SAVC	
	Dr Clive P Marwick		SAVC	
	Dr D Odendaal		SAVC	
	Dr Rebone Moerane		SAVC	

VETERINARY AND PARA-VETERINARY ASSOCIATIONS				
3/10/12	Alison Shepperd		SAEVA (SA Equine Veterinary Association)	Grasdak at Onderstepoort
	Deryn Petty Peter Sehlodimela		SASVA (SA State Veterinary Asso.)	
	Riaan du Preez		SAVA (SA Veterinary Asso.)	
	Faffa Malan		LHPG – Livestock health and production group of SAVA	
	Tom Spencer		PVS – Pig veterinary society of SAVA	
	Phemelo Kegakilwe		N. Cape VS	
	P Vervoort		Animal Health Forum	
	WA Schultheiss		LHPG	
FIELD VISITS, MEETINGS AND INTERVIEWS				
1. NORTH WEST, FREE STATE & GAUTENG PROVINCIAL VISITS				
DAY ONE BLOEMFONTEIN LAB				
8/10/12	Dr. Julia Punderson	OIE Specialist	OIE/PVS	LAB-Freestate
	Dr. Mpho Maja	Director of Animal Health	DAFF	
	Dr. Moroe Rubashe	State Veterinary	DAFF	
	Dr. KJ Mojapelo	Director	DOA Freestate Province	
	Dr. MP Thabethe	Head of Department		
	Dr. MSK Mashishi	Deputy Director		
	Dr. PJ Olivier	Acting General Manager	Agricultural division support and livelihoods	
	JL Vermeulen	Lab Manager	Vet lab SA-Vet services	
	W Derbyshire	VPH Coordinator	VPH Freestate	
	Dr. Sarah Mutsinzo	Deputy Director VPH and Export	Vet services	
	S Dhlamini	Chief Financial Officer	DOA Freestate Province	
DAY TWO MASERU BORDER				
9/10/12	Dr. Moroe Rubashe	State Veterinary	DAFF	Maseru Border
	Lion Simpson	Port Co	BCOCC (SARS)	
	Mammvuso Ntholeng	Executive assistant	BCOCC	
	Dr. Sarah Mutsinzo	Deputy Director VPH and Export	Vet services	
	Dr. Thabo Lerothole	State Veterinary	Vet Services Ladybrand	
	Dr. KJ Mojapelo	Director	DOA Freestate Province	
	Dr. MSK Mashishi	Deputy Director		
	NB Luvhimbi	Control Animal Health Technician	DAFF	
	Tumane Mbele	Port Health Officer	Maseru Bridge	
	BL Mashilo	Animal Food and Quarantine Technician	Maseru Bridge	
	MC Masibuko	Senior Technician	DAFF	
	Elijah Modisane	Chief Technician	DAFF	
	Dr. Julia Punderson	OIE Specialist	OIE/PVS	

FICKSBURG BORDER (LESOTHO)				
9/10/12	Dr. KJ Mojapelo	Director	DOA Freestate Province	Ficksburg Border
	Dr. Julia Punderson	OIE Specialist	OIE/PVS	
	TS Blansore	Lieutenant	SAPS	
	NB Luvhimbi	Control Animal Health Technician	DAFF	
	Elijah Modisane	Chief Technician	DAFF	
	Dr. Sarah Mutsinzo	Deputy Director VPH and Export	Vet services	
	Dr. MSK Mashishi	Deputy Director	DOA Freestate Province	
	Dr. Moroe Rubashe	State Veterinary	DAFF	
	FT Sikhosana	Environmental Health Practitioner	Department of Health	
	ZW Hemani	EHP Border control services	Department of Health	
	Tsepo C Ramathe	Team leader	SARS	
	AAK Goliath	Port coordinator	BCOCC (SARS)	
	MT Litelu	Port Health Officer	Port Health	
DAY THREE SAVA-BETHLEHEM				
	Dr Julia Punderson	OIE team member	OIE	
10/10/12	Dr. D L Laubsher	Chairperson Veterinarian	SAVA Chairperson Eastern Freestate	SAVA Bethlehem
	Dr Liezel Wasserman	Private Veterinarian	SAVA Private Vet	
	Dr JF Janse Van Rensburg	Private Veterinarian	Clocolan Private Vet	
	Dr. HJ Basson	Vise President SAVA	Bethlehem Private Vet	
FARMERS UNION MEETING-BETHLEHEM				
	Dr J Punderson	OIE team member	OIE	
10/10/12	A Ferreira	Committee member (Ex-chairman)	Red meat producer	Farmers Union-Bethlehem
	N de Villiers	Chairman	Freestate Red meat producers	
	F Schutte	Vice chairman	Freestate Buffalo MSS	
	Pinkie Craven	Law and Order committee	Freestate Agriculture	
	Kevin Jordan	Safety officer	Fouriesburg farmers association	
STOCK THEFT STATE VET BETHLEHEM OFFICE				
10/10/12	Dr. KJ Mojapelo	Director	DOA Freestate	Stock theft meeting
	Dr. Sarah Mutsinzo	Deputy Director VPH and Export	Vet services	
	Dr. MSK Mashishi	Deputy Director	DOA Freestate Province	
	HT Madlakana	Captain	SAPS	
	HJ Weihmann	WO	SAPS	
	Dr Julia Punderson	OIE team member	OIE	

DAY FOUR UITKYK /GEGROND-BULFONTEIN				
11/10/12	Dr Julia Punderson	OIE team member	OIE	Uitkyk-Bulfontein
	Dr. Sarah Mutsinzo	Deputy Director VPH and Export	Vet services	
	NR Mhlambi	Animal Health Technician	Vet services	
	J Wessels	Farmer	Freestate	
	FJ Wessels	Control Animal Health Technician	Vet services	
KROONSTAD LAB				
11/10/12	Dr Julia Punderson	OIE team member	OIE	LAB-Freestate
	Marie van Zyl	Laboratory manager	Vet Laboratory-Kroonstad	
SASOLBURG LAB				
11/10/12	Dr. Raletsiri Matlala	State veterinary	Sasolburg DOA Freestate	LAB-Freesate
	Herman Hattingh	Control Animal Health Technician		
	Dr. KJ Mojapelo	Director	DOA Freestate	
	Dr. Moroe Rubashe	State Veterinary	DAFF	
SPARTA FOOD-WELKOM				
11/10/12	Dr. KJ Mojapelo	Director	DOA Freestate Province	SPARTA FOOD
	Dr. Julia Punderson	OIE Specialist	OIE/PVS	
	Dr. MSK Mashishi	Deputy Director	DOA Freestate Province	
	Dr. Sarah Mutsinzo	Deputy Director VPH and Export	Vet services	
	Truth Houston	Health and Safety Manager	Sparta food	
	Sean Goodson	Production manager	Sparta foods	
	Dr. PL Phandiwe	Chief State Veterinary	DOA Freestate Province	
DAY FIVE KARAN FEEDLOT AND ABATTOIR				
12/10/12	Dr. Julia Punderson	OIE Specialist	OIE/PVS	KARAN BEEF
	Dr. Moroe-Rulashe	State Veterinary	DAFF	
	Bennie J Welgemoed	RD Manager	Karan Beef	
	Dr. Denise N Lloyd	VPH Veterinary	IMQAS	
	Dr. Malcolm De Bude	Chief Director Gauteng	DOA Gauteng	
	Dr. Alan M Kalake	Director Gauteng	DOA Gauteng	
	Jannie Botha	General Manager	Karan Beef	
	Dr. Duma Mpofu	State Veterinary	Karan Beef	
DAY SIX QUARANTINE STATION-BONAERO PARK				
13/10/12	Dr. Ian Mcdonald	Chief State Veterinary	Inspection services quarantine	Quarantine Station-Freestate
	MR Limba	Chief Animal Health Technician		
	MS Tokwe	Senior Animal Health Technician		
	Dr Julia Punderson	OIE team member	OIE	
	Dr. Sarah Mutsinzo	Deputy Director VPH and Export	Vet services	
OR TAMBO INTERNATIONAL AIRPORT (ORTIA)-D:15				
13/10/12	XR Kato	Senior Agricultural food technician	K9 Unit for import control	
	AJ Mhlanga	Food and quarantine technician	DAFF	
	Philidelphia Vilikazi	Chief food and quarantine technician	DAFF	

	A Steyn	Control Food quarantine technician	DAFF	
SAVA OFFICES				
13/10/12	BL Penzhorn	Managing Director	SAVA	SAVA
2. NORTHERN & WESTERN CAPE VISITS				
4/10/12	Phemelo Kegakilwe	Director	Northern Cape	Provincial office, Kimberley
	Hugo Martyniuk	SV Export	Northern Cape	
	Arthur Victor	SV VPH and Export	Northern Cape	
	Trudie Prinsloo	SV Animal Health	Northern Cape	
	Modupe Letsie	SV	Northern Cape	
	Mariétta Bronkhorst	SV DAFF	Northern Cape	
	Thabang	?	Northern Cape	
	D Kriel	Technician	Northern Cape	
	James Faber	Red Meat Producers	Northern Cape	
	Albert Grundlingh	Red Meat Abattoir Association	Northern Cape	
	Abi Messelaar	NAFU (Farmer Organisation)	Northern Cape	
	David Paulse	Dept Environment	Northern Cape	
	Tienie Neethling	Wildlife Ranching SA	Northern Cape	
	Noreen Crisp	Department of Health	Northern Cape	
	AJ Venter	SA Police Service	Northern Cape	
	Joe van Heerden	Private Veterinarian	Northern Cape	
	Cobus Fourie	Beefmaster Abattoir	Northern Cape	Beefmaster abattoir Kimberley
	Rosinah Mabe	IMQAS	Northern Cape	
	Jafta Tolomo	Beefmaster Abattoir	Northern Cape	
	MacDonald Gayakaya	SV	Northern Cape	
	SL van Staden	Kuruman Abattoir	Northern Cape	Kuruman Abattoir
	Tebogo Mogongoa	VPH	Northern Cape	Kuruman SV office
	Erwin Lucas	Animal Health Tech	Northern Cape	
	GBM van der Westhuizen	SV Kuruman	Northern Cape	
	Franciska Einkamerer	CAHT Kuruman	Northern Cape	
	BM Eilers	SV	Northern Cape	
	J Vermeulen	AHT Kuruman	Northern Cape	
5/10/12	Paul Schoeman	Stock Theft	Northern Cape	
	MD Ilanka	Kono CPA	Northern Cape	
	Jan Joubert	Kuruman Agri	Northern Cape	
	Jaco Vorster	Kaap Agri	Northern Cape	
	JM Stofberg	Kuruman Farmer	Northern Cape	
	Petro Spangenberg	Kuruman farmer	Northern Cape	
	Anton Gregory	Kuruman Agri	Northern Cape	
	Stefan van der Walt	Kuruman farmer	Northern Cape	
	David Rattez	Kamdenb/v	Northern Cape	
	Phebia Chabedi	Environmental Health Practitioner	Northern Cape	
	?	Animal Health technician	Northern Cape	Tsineng AHT office
	?	D: Inspection Services	Northern Cape	Middelputs border post
	?	AHT	Northern Cape	Van Zyls Rust
	Graeme Ellis	Sanparks	Northern Cape	Kgalagadi Park
	Micho Ferreira	Sanparks	Northern Cape	Kgalagadi Park
	?	Private veterinarian	Northern cape	Private vet clinic in Upington
	?	Private veterinarian	Northern cape	
	Roelien Verwey	VS Upington	Northern Cape	Upington SV office
	Florinda Morris	VS Upington	Northern Cape	

	PW Husselmann	VS Upington	Northern Cape	
	B Nel	SV Upington	Northern Cape	
	CF Labuschagne	Stock Theft Upington	Northern Cape	
6/10/12	Danie Jacobs	Red meat producers	Northern Cape	Springbok SV office
	Manie Dixon	Agri Namakwaland	Northern Cape	
	Sydney Cloete	Steinkopf farmer	Northern Cape	Steinkopf
	Stevie Cloete	Steinkopf farmer	Northern Cape	Steinkopf
	GE Cloete	Steinkopf farmer	Northern Cape	Steinkopf
	RA Balie	Steinkopf farmer	Northern Cape	Steinkopf
	A Balie	Steinkopf farmer	Northern Cape	Steinkopf
	Marlene Pieterse	VS Springbok	Northern Cape	Steinkopf
	Llewellyn Saal	VS Springbok	Northern Cape	Steinkopf
	RL Cloete	D: Inspection Services	Northern Cape	Vioolsdrift Border Post
8/10/12	Pieter Koen	Deputy Director Animal Health	Western Cape	Provincial office Elsenburg
	Vincent Henwood	SV Swartland	Western Cape	
	Lesley van Helden	SV Disease control	Western Cape	
	Gary Buhrmann	CSV Boland	Western Cape	
	Marthiens Wolhuter	SV VPH DAFF	Western Cape	
	Lugen Govender	Data processor Epidemiology	Western Cape	
	Gininda Msiza	Chief Director VS	Western Cape	
	Christi Kloppers	DD: VPH	Western Cape	
	Aileen Pypers	SV	Western Cape	
	Annelie Cloete	SV State herds and training	Western Cape	
	John Grewar	SV Epidemiology	Western Cape	
	Renee Pieterse	Provincial laboratory	Western Cape	Stellenbosch laboratory
	Dave Roberts	Provincial laboratory	Western Cape	
	?	Private veterinarian	Western Cape	Kenilworth horse export quarantine
	John Adam	Private Veterinarian and SAVA	Western Cape	Capetonian Hotel
9/10/12	Henry Kemp	Harbour control	Western Cape	Cape Town Harbour
	Niek Naude	SV D: Inspection Services	Western Cape	Cape Town Harbour and Milnerton government quarantine
	Nokuthula Tsele	AHT Swellendam	Western Cape	Swellendam SV office
	Gerhard van Wyk	AHT Swellendam	Western Cape	
	LJ Hon	SV Swellendam	Western Cape	
	Roelof Maré	VS Swellendam	Western Cape	
	Norman Pearson	Private veterinarian	Western Cape	
10/10/12	JA Schoonwinkel	Dairy farm	Western Cape	Swellendam area
	Tertius Carstens	Parmalat Bonnievale (milk processing)	Western Cape	
	Antony Steven	Langeberg Cheese	Western Cape	
	Charles de Kock	Serene Jerseys dairy farm	Western Cape	
	SI Bredenkamp	Animal Health	Western Cape	Albertinia
	E Lottering	Dept Agric	Western Cape	
	Tienie Botha	Mosstrich ostrich abattoir	Western Cape	
	SJ Poggenpoel	Sanfontein farm	Western Cape	
	H Schlechter	AHT Mosselbay	Western Cape	AHT office

				Mossel Bay
11/10/12	Jan van Rensburg	Van Rensburg Meat	Western Cape	George
	Jacques van Greunen	Van Rensburg Meat	Western Cape	George
	JA Lambert	IMQAS	Western Cape	George
	Toni Raschbichler	Van Rensburg Meat	Western Cape	George
	Kathy Wiles	AHS equi-link	Western Cape	George SV office
	Cathy Fox	SV George	Western Cape	
	George Kuyler	Milk Producers, Southern Cape Farmers	Western Cape	
	Sam Las	Mooiplaas farmer	Western Cape	
	Eddie Lottering	AHT George	Western Cape	
	Thinus van Rensburg	Klein Karoo Red Meat abattoir	Western Cape	
	Piet Kleyn	Ostrich Business Chamber	Western Cape	Oudtshoorn
	Piet Lodder	Agri Klein Karoo	Western Cape	
	Mattee van Tonder	Deltamune private laboratory	Western Cape	
	Willem Burger	Private veterinarian (game)	Western Cape	
12/10/12	Demoina	Klein Karoo ostrich abattoir	Western Cape	
	BJ Grobler	SV Beaufort West	Western Cape	Beaufort West
	Jaco Pienaar	SV Beaufort West	Western Cape	Beaufort West
	Amanda Vermeulen	Vet Tech Beaufort West	Western Cape	Beaufort West
	Elouise Hattingh	Animal Health	Western Cape	Beaufort West
	Jan Murray	Soetdorings farm	Western Cape	Beaufort West
	?	Soetdorings farm	Western Cape	Beaufort West
13/10/12	JS Marais	De Aar SV office	Western Cape	De Aar
	N Matekwe	SV De Aar	Western Cape	De Aar
	RJ Botha	Waterdal ostrich farm	Western Cape	De Aar
	M Botha	Waterdal ostrich farm	Western Cape	De Aar
3. MPUMALANGA & LIMPOPO PROVINCIAL VISITS				
DAY ONE POLOKWANE HEAD OFFICE				
4/10/12	Dr. John Stratton	PVS Expert	OIE Expert	Polokwane Veterinary Services
	Dr. Willie Ungerer	Deputy Director	DAFF	
	Dr. Grietjie De Klerk	State Veterinary	DAFF	
	Dr. Lucas Mampane	Director	Limpopo Department Agriculture	
	Dr. Peter Loock	Deputy Director		
MOKOPANE STATE VET OFFICE				
4/10/12	Dr. John Stratton	PVS Expert	OIE Expert	Mokopane State Vet Office
	Dr. Willie Ungerer	Deputy Director	DAFF	
	Dr. Grietjie De Klerk	State Veterinary	DAFF	
	G. Coetzer	Control Animal Health Technician	Limpopo Department Agriculture Mogalakwena	
	E. Kekana	Control Veterinary Technologist	Mokopane Vet Lab	
	Dr. Nobert Mangwiro	State Veterinary		
	Dr. E Klomp	State Veterinary	State Vet Mokopane	

LANDMARK CO-OP SHOP AND OFFICE				
4/10/12	Dr. John Stratton	PVS Expert	OIE Expert	Landmark Co-Op
	Dr. Willie Ungerer	Deputy Director	DAFF	
	Dr. Grietjie De Klerk	State Veterinary	DAFF	
	Dr. Lucas Mampane	Director	Limpopo Department Agriculture	
	About 3 different farmers from the area	Farmer	Farms in and around the area	
	Cooperation Manager	Manager	LANDMARK	
	Floor Manager	Manager	LANDMARK	
DAY TWO BEITBRUG BORDERPOST OFFICE				
5/10/12	Dr. John Stratton	PVS Expert	OIE Expert	Beitbrug Borderpost office
	Dr. Willie Ungerer	Deputy Director	DAFF	
	Dr. Grietjie De Klerk	State Veterinary	DAFF	
	Dr. Vonani Mashau	State Veterinary	Agriculture Vet Musina	
	Dr. Chris Mabaso	Deputy Director	Limpopo Department Agriculture	
	Denga Edith	Chief Agricultural Food & Quarantine Technicians	DAFF: Beitbrug	
	Sello Monama			
	Mooketsa Ramasodi	Director Inspection Services	DAFF	
SHELDRAKE GAME FARM				
5/10/12	Dr. John Stratton	PVS Expert	OIE Expert	Sheldrake Buffalo Breeding
	Dr. Willie Ungerer	Deputy Director	DAFF	
	Dr. Grietjie De Klerk	State Veterinary	DAFF	
	Dr. Vonani Mashau	State Veterinary	Agriculture Vet Musina	
	Owner	Farmer	Sheldrake farm	
VENCOR ABBATOIR AND FEEDLOT OFFICE				
5/10/12	Dr. John Stratton	PVS Expert	OIE Expert	VENCOR Abattoir
5/10/12	Dr. Willie Ungerer	Deputy Director	DAFF	
5/10/12	Dr. Grietjie De Klerk	State Veterinary	DAFF	
5/10/12	Dr. Johan Mentz	Chief State Veterinary	VPH Limpopo	
5/10/12	Stoffel Oberbholzer	Meat Inspector	Zero Plus Services	
5/10/12	Josef Espag	Production Manager	Vencor	
5/10/12	C. Calitz	Managing Director	Vencor	
DAY THREE MADIMBO CORIDOR				
6/10/12	Dr. John Stratton	PVS Expert	OIE Expert	SANDF Madimbo Coridor
	Dr. Willie Ungerer	Deputy Director	DAFF	
	Dr. Grietjie De Klerk	State Veterinary	DAFF	
	Dr. Vonani Mashau	State Veterinary	Agriculture Vet Musina	
	Corporal	Corporal	SANDF	
DAY FOUR SKUKUZA STATE VET				
7/10/12	Dr. John Stratton	PVS Expert	OIE Expert	Skukuza - State Vet
	Dr. Willie Ungerer	Deputy Director	DAFF	
	Dr. Grietjie De Klerk	State Veterinary	DAFF	
	Dr. Louis van Schalkwyk	State Veterinary	Skukuza Camp - KNP	
	Dr. Markus Hofmeyer	SANPARKS Veterinary		

DAY FIVE JOSEPHINE PIET WARREN OFFICE				
8/10/12	Dr. John Stratton	PVS Expert	OIE Expert	Josephine Farm
	Dr. Willie Ungerer	Deputy Director	DAFF	
	Dr. Grietjie De Klerk	State Veterinary	DAFF	
	Dr. Chris Mabaso	Deputy Director	Limpopo Department Agriculture	
	Dr. KV Letsoalo	State Veterinary		
	Piet Warren	Farmer and Abattoir owner	Farm: Josephine	
JOSEPHINE PIET WARREN ABATTOIR OFFICE				
8/10/12	Dr. John Stratton	PVS Expert	OIE Expert	Josehine Abattoir
	Dr. Willie Ungerer	Deputy Director	DAFF	
	Dr. Grietjie De Klerk	State Veterinary	DAFF	
	Dr. Chris Mabaso	Deputy Director	Limpopo Department Agriculture	
	Dr. KV Letsoalo	State Veterinary		
	Dr. CF Steinmann			
	Piet Warren	Farmer and Abattoir owner	Farm: Josephine	
	XP Ntimbani	Control Animal Health Technician	Limpopo Department Agriculture	
	S.F Maswangayi			
	J Zandamela			
	NA Tsetswa			
	JM Van Der Merwe	Owner	Farmer	
	Ian Bester	Manager	Farmer (Selati)	
SHULEKANI/SELVANI DIPTANK				
8/10/12	Dr. John Stratton	PVS Expert	OIE Expert	Diptank Selvani
	Dr. Willie Ungerer	Deputy Director	DAFF	
	Dr. Grietjie De Klerk	State Veterinary	DAFF	
	Dr. Chris Mabaso	Deputy Director	Limpopo Dept Agriculture	
	Dr. KV Letsoalo	State Veterinary		
	About 10 farmers from in and around the area	Farmers	Selvani	
HANS HOHEISEN RESEARCH FACILITY				
8/10/12	Dr. John Stratton	PVS Expert	OIE Expert	Hans Hoheisen
	Dr. Willie Ungerer	Deputy Director	DAFF	
	Dr. Grietjie De Klerk	State Veterinary	DAFF	
	Dr. Greg Simpson	Private Veterinary	Vluvukani Animal clinic- University Pretoria	
	Dr. B Reininghaus	State Veterinary	DOA Mpumalanga	
DAY SIX MPUMALANGA HEAD OFFICE				
9/10/12	Dr. John Stratton	PVS Expert	OIE Expert	Mpumalanga Veterinary Head Office
	Dr. Willie Ungerer	Deputy Director	DAFF	
	Dr. Grietjie De Klerk	State Veterinary	DAFF	
	Dr. MV Mnisi	Director	MPU DARDLA VS	
	Dr. Ben Du Plessis	Deputy Director		
	Dr. Ian Randmore	Assistant Director		
	Dr. Moses Mabunda	Deputy Director		
	Dr. Dirk Uys	Assistant Director		
	Dr. Yemi Akerele	Deputy Director		
	Dr. Ndayeni M Ndamase	Deputy Director		
	Dr. SM Ndaka	Chief Director		
	NS Mndawe	Abattoir Manager	Ngogolo Poultry Abattoir	
	H Engelbrecht	Manager	Abattoir	
	Geoffrey Anderson	Director	Mikon Abattoir	

	Mark Tecklenbulk	Director	Ramsburg Beef	
	Barend Janse van Rensburg	Manager	MPU Landbou Boer Nelspruit	
	Koos Davel	Chairman	MPU Red meat producers	
	Louw Steyn	Manager DLA	MPU Tourism Parks Agency	
	Jan Muller	Senior Manager		
	Albert de Lange	Intelligence	SANDF	
	Dr. D Brugman	Chief State Veterinary	MPU DARDLA VS	
	J Sutherland	Chairperson Ngwenya	SA Hunt and Game	
THULAMAHASHE SV OFFICE				
9/10/12	Dr. John Stratton	PVS Expert	OIE Expert	Thulamahashe State Veterinary office
	Dr. Willie Ungerer	Deputy Director	DAFF	
	Dr. Grietjie De Klerk	State Veterinary	DAFF	
	Dr. Ben Du Plessis	Deputy Director	MPU DARDLA VS	
	Dr. SM Ndaka	Chief Director		
	Dr. Oupa Rikhotso	Deputy Director		
	Richard Silinda	Control Animal Health Technician		
DAY SEVEN CHEARE DIPTANK				
10/10/12	Dr. John Stratton	PVS Expert	OIE Expert	Cheare Diptank
	Dr. Willie Ungerer	Deputy Director	DAFF	
	Dr. Grietjie De Klerk	State Veterinary	DAFF	
	Dr. Ben Du Plessis	Deputy Director	MPU DARDLA VS	
	Dr. SM Ndaka	Chief Director		
	Dr. Oupa Rikhotso	Deputy Director		
	Richard Silinda	Control Animal Health Technician		
LEBOMBO BORDER				
10/10/12	Dr. John Stratton	PVS Expert	OIE Expert	Lebombo border
	Dr. Willie Ungerer	Deputy Director	DAFF	
	Dr. Grietjie De Klerk	State Veterinary	DAFF	
	Dr. Ben Du Plessis	Deputy Director	MPU DARDLA VS	
	Dr. SM Ndaka	Chief Director		
	Dr. Oupa Rikhotso	Deputy Director		
	Richard Silinda	Control Animal Health Technician		
	Dr. Ben Du Plessis	Deputy Director		
	Dr. MV Mnisi	Director		
	Dr. J Kotze	State Veterinary		
MANANGA BORDER				
10/10/12	Dr. John Stratton	PVS Expert	OIE Expert	Mananga border
	Dr. Willie Ungerer	Deputy Director	DAFF	
	Dr. Grietjie De Klerk	State Veterinary	DAFF	
	Dr. Ben Du Plessis	Deputy Director	MPU DARDLA VS	
	Dr. SM Ndaka	Chief Director		
	Dr. Oupa Rikhotso	Deputy Director		
	Richard Silinda	Control Animal Health Technician		
	Dr. Ben Du Plessis	Deputy Director		
	Dr. MV Mnisi	Director		

HECTORSPRUIT SV OFFICE				
10/10/12	Dr. John Stratton	PVS Expert	OIE Expert	Hectorspruit SV office
	Dr. Willie Ungerer	Deputy Director	DAFF	
	Dr. Grietjie De Klerk	State Veterinary	DAFF	
	Dr. Ben Du Plessis	Deputy Director	MPU DARDLA VS	
	Dr. SM Ndaka	Chief Director		
	Dr. Oupa Rikhotso	Deputy Director		
	Richard Silinda	Control Animal Health Technician		
	Dr. Ben Du Plessis	Deputy Director		
	Dr. MV Mnisi	Director		
	Len Roberts	Control Animal Health Tecnician		
DAY EIGHT ERMELO AUCTION OFFICE				
11/10/12	Dr. John Stratton	PVS Expert	OIE Expert	Ermelo Auction
	Dr. Willie Ungerer	Deputy Director	DAFF	
	Dr. Grietjie De Klerk	State Veterinary	DAFF	
	Dr. PS Lourens	Assistant Director	MPU DARDLA VS	
	AM Storm	Control Animal Health Technician		
	EM Lourens	Control Animal Health Technician		
	WJ Meyer	Managing Director	Vleissentraal Ermelo	
	M Mentz	Branch Manager	BKB van Wyk	
TRIO AUCTION OFFICE				
11/10/12	Dr. John Stratton	PVS Expert	OIE Expert	TRIO Auction
	Dr. Willie Ungerer	Deputy Director	DAFF	
	Dr. Grietjie De Klerk	State Veterinary	DAFF	
	Dr. MV Mnisi	Director	MPU DARDLA VS	
	Dr. B Ndebele	Deputy Director		
	Dr. TS Ushamba	State Veterinary		
	Dr. S Mpofu	State Veterinary	Gauteng Veterinary Services	
	Dr. D R Sibanda	State Veterinary	MPU DARDLA VS	
	S.Venter	Owner	Trio Auctions	
DAY NINE THABA KWENA CROC FARM OFFICE				
12/10/12	Dr. John Stratton	PVS Expert	OIE Expert	Thaba Kwena Croc Farm
12/10/12	Dr. Willie Ungerer	Deputy Director	DAFF	
12/10/12	Dr. Grietjie De Klerk	State Veterinary	DAFF	
12/10/12	Dr. P Geertsema	Deputy Director	Gauteng Dept Agriculture	
12/10/12	A Cordier	VPH Official	VPH Department of Agriculture	
12/10/12	Dr. J Mentz	Chief State Veterinary		
12/10/12	E. Behrens	Abattoir manager	Thaba Kwena	
12/10/12	A Pretorius	Owner		
DELTAMUNE LAB GAUTENG				
12/10/12	Dr. John Stratton	PVS Expert	OIE Expert	Deltamune LAB
12/10/12	Dr. Willie Ungerer	Deputy Director	DAFF	
12/10/12	Dr. Grietjie De Klerk	State Veterinary	DAFF	
12/10/12	Dr. P Geertsema	Deputy Director	Gauteng Dept Agriculture	
	Deryn Petty	CSV Biosecurity		
12/10/12	Dr. Hannes Swart	Chief Executive Officer	Deltamune	
12/10/12	Dionne Rauff	Lab Manager	Deltamune	

4. KWAZULU-NATAL & EASTERN CAPE PROVINCIAL VISITS				
Emilio Leone (OIE), Tembile Songabe (DAFF) and Cornelia Gerstenberg (DAFF)				
Port Elizabeth (PE) Provincial State Veterinary (SV) Office				
4/10/12	Jane Pistorius	Western District SV Manager	ECP Dept Agriculture	PE Provincial SV Office
	Werner Kruger	State Veterinarian PE SV office		
	Cebisa Mnqeta	Director ECP Veterinary Services		
	T A Rose	Control Animal Health Technician (AHT)		
	H Geyser	AHT		
	Z Ntondini	Amatole District SV Manager		
PE National SV Offices (Directorate: Inspection Services = D:IS)				
4/10/12	Ian Burnand	State Veterinarian	DAFF Directorate: Inspection Services	PE National Inspection Services Office
	Chris Darke	State Veterinarian		
	F Baard	Inspection Official (Meat Inspector)		
	C Shozi	Inspection Official (Animal Health Technician)		
	T Nazo	Senior Admin Clerk		
	A Mnyani	Office Assistant		
PE Stakeholders Meeting				
4/10/12	Jane Pistorius	Western District SV Manager	ECP Dept Agriculture	ECP Dept Agriculture Building
	H Geyser	AHT		
	S Mathews	Dairy Farmer	ECP Milk Producers Organization	
	M J Potgieter	Private Veterinarian	LHPG (Livestock Health and Production Group) of the SAVA (South African Veterinary Association)	
	Ian Burnand	State Veterinarian	DAFF Directorate: Inspection Services	
	D Zimmermann	Wildlife Veterinarian	SANParks (South African National Parksboard)	
	F A van Niekerk	Private Veterinarian Humansdorp		
	Marlies Böhm	Private Veterinarian King Edward Referral Hospital	Southern Cap Branch of the SAVA	
Grahamstown Provincial SV Office and Provincial Satellite Veterinary Laboratory				
5/10/12	Jane Pistorius	Western District SV Manager	ECP Dept Agriculture	Grahamstown Provincial SV Offices
	Charlene Boy	State Veterinarian Grahamstown SV Office		
	B Bowker	State Veterinarian (Export)		
	G Mutero	State Veterinarian Grahamstown SV Laboratory		

Graaff-Reinet Game and Ostrich Meat Export Abattoir				
5/10/12	Jane Pistorius	Western District SV Manager	ECP Dept Agriculture	Graaff-Reinet Meat Suppliers (Camexo Abattoir)
	Mac McFarlane	Provincial SV Graaff-Reinet	ECP Dept Agriculture	
	Ben Booysens	Quality Assurance and Occupational Health and Safety Officer		
	Cashewel Carstens	Meat Inspector	IMQUAS	
Graaff-Reinet Karoo Taxidermy				
5/10/12	Jane Pistorius	Western District SV Manager	ECP Dept Agriculture	Karoo Taxidermy
	Mac McFarlane	Provincial SV Graaff-Reinet	ECP Dept Agriculture	
	Mary-Lou Dickson	Secretary	Karoo Taxidermy	
	Sean Kitching	Manager	Karoo Taxidermy	
	Charmaine Erasmus	Secretary	Karoo Taxidermy	
Graaf-Reinet Provincial SV Office				
5/10/12	Jane Pistorius	Western District SV Manager	ECP Dept Agriculture	Graaff-Reinet Provincial SV Office
	M Macfarlane	Provincial SV Graaff-Reinet	ECP Dept Agriculture	
Graaf-Reinet Stakeholders Meeting				
5/10/12	Jane Pistorius	Western District SV Manager	ECP Dept Agriculture	Graaff-Reinet Provincial SV Office
	Mac Macfarlane	Provincial SV Graaff-Reinet	ECP Dept Agriculture	
	J Coetzee	Mohair Farmer	SA Mohair Growers	
	A Steyn	Member of Parliament and Farmer		
	C Coetsee	Farmer	RPO (Red Meat Producers Organization)	
	Ronald McNaughton	Farmer	NWGA (National Wool Growers Association)	
King William's Town Provincial SV Headoffice (Crown Hotel)				
6/10/12	C L Mnqeta	Director Eastern Cape Province VS	ECP Dept Agriculture	Crown Hotel Provincial SV Headoffice
	V Rozani	Eastern Cape Province Head VPH	ECP Dept Agriculture	
	P M Ndwayi	Eastern Cape Province Animal Health	ECP Dept Agriculture	
King William's Town Stakeholders Meeting				
6/10/12	C L Mnqeta	Director Eastern Cape Province VS	ECP Dept Agriculture	Crown Hotel Provincial SV Headoffice
	V Rozani	Eastern Cape Province Head VPH		
	P M Ndwayi	Eastern Cape Province Animal Health		
	P W Prinsloo	Chairman ECRPO	ECP National Emerging Red Meat Producers Organization	
	D Mlotana	Deputy Chair NEPRO		
	S W Mtshayana	Regional Chairperson NEPRO		
	D Goqwen	District Council NEPRO		
	A Ndzendze	Chairman EC WGA	ECP Wool Growers Association	
	M S Mnyanda	Deputy Chair Amatole WGA		

	R J Taylor	Vet consultant Private		
	E P Wood	Private veterinarian		
	Ronthia Viljoen	Chairperson ECOPA	ECP Ostrich Producers Organization	
	G R Kruuse	AGRIC EC Council member	Agriculture Organization ECP	
Döhne Animal Disease Surveillance Unit (ADSU) Provincial SV Office (Stutterheim)				
6/10/12	C L Mnqeta	Director Eastern Cape Province Veterinary Services	ECP Dept Agriculture	Döhne Provincial ADSU Office
	V Rozani	Eastern Cape Province Head VPH		
	P M Ndwayi	Eastern Cape Province Animal Health		
	N Ndzamela	Animal Health Manager Chris Hani		
	I Lwanga-Iga	Manager Exports & ADSU ECP		
	S Kroll-Lwanga-Iga	SV ADSU		
	Matshoba	AHT ADSU		
Visit to Mahludini Diptank and Ostrich BEE Project in Peddie Local Municipality				
7/10/12	C L Mnqeta	Director Eastern Cape Province VS	ECP Dept Agriculture	Peddie Local Municipality
	V Rozani	Eastern Cape Province Head VPH		
	P M Ndwayi	Eastern Cape Province Animal Health		
	N Ndzamela	Animal Health Manager Chris Hani		
	Jane Pistorius	Western District SV Manager		
	Zoleka Ntondini	Amatole District SV Manager		
	Toyota Ndudane	Director: Livestock Development		
Pietermaritzburg (PMB) large Beef Abattoir and Feedlot				
8/10/12	Mark Warren	Deputy Director (DD): Veterinary Public Health (VPH) – KZN South Region	KZN Department of Agriculture and Environmental Affairs (DAE)	Triple A Abattoir and Feedlot
	Etienne Westbier	CEO	Triple A	
	Kobus	Abattoir Manager	Triple A	
	Mayen Govender	Quality Assurance Officer	Triple A	
	Ray Sidey	Director	Triple A	
	?	Meat Inspector	IMQUAS	
Hamersdale large Poultry Processing Plant				
8/10/12	Mark Warren	DD: VPH KZN South	KZN DAE	Rainbow Processing Plant
8/10/12	Nokuthula Ntseki	National Veterinarian	Rainbow Chicken Ltd	
8/10/12	Pra Ori	?		
8/10/12	Henry Trustler	Manager		
8/10/12	Vandesh	Quality Assurance Manager		
8/10/12	Onisha Devchand	State Veterinarian: VPH	KZN DAE	

Allerton Provincial SV Office and Laboratory				
8/10/12	Dumisani Mtshali	Senior Manager Veterinary Services: KZN North Region	KZN DAE	Allerton Laboratory
	T A Sikhakhane	Senior Manager Veterinary Services: KZN South Region	KZN DAE	
	D W Ngobese	Deputy Director: Allerton Laboratory	KZN DAE	
	Mark Warren	DD: VPH KZN South	KZN DAE	
	Keith Perrett	State Veterinarian: Epidemiology	KZN DAE	
	Jackie le Roux	Control Veterinary Technologist	KZN DAE	
	K Nokoyo	State Veterinarian: Laboratory	KZN DAE	
	M Masimege		KZN DAE	
	S Chisi		KZN DAE	
	K Govender		KZN DAE	
Allerton Provincial SV Epidemiology Section				
8/10/12	Keith Perrett	State Veterinarian: Epidemiology	KZN DAE	Allerton Epidemiology
	Debbie Cooke	AHT: Epidemiology	KZN DAE	
PMB Stakeholders Meeting				
8/10/12	Dumisani Mtshali	Manager Veterinary Services: KZN North Region	KZN DAE	Allerton Laboratory
	T A Sikhakhane	Manager Veterinary Services: KZN South Region	KZN DAE	
	D W Ngobese	Deputy Director: Allerton Laboratory	KZN DAE	
	Jackie le Roux	Chief Veterinary Technologist	KZN DAE	
	Keith Perrett	State Veterinarian: Epidemiology	KZN DAE	
	Philip Kretzmann	Private Veterinarian	LHPG of SAVA	
	Roger Horner	Veterinarian and Laboratory Consultant		
	Barry Gibbs	Pig Farmer	SA Pig Producers Organization (SAPPO)	
	Sandy Lamarque	CEO	Kwanalu (KZN Agricultural Farmers Organization)	
	Edzel Hohls	Farmer	Milk Producers Organization (MPO)	
	P Ralfe	Farmer	RPO	
	G P Hartley	Private Veterinarian	SAVA	
Durban Provincial SV Office				
9/10/12	Dumisani Mtshali	Manager Veterinary Services: KZN North Region	KZN DAE	Durban Provincial SV Office
	Shavita Danilall	State Veterinarian: Durban	KZN DAE	
	Joey Peens	Control AHT: Durban	KZN DAE	

Durban National SV Offices (Directorate: Inspection Services)				
9/10/12	S Soni	State Veterinarian and Manager Animal Quarantine Unit	DAFF Directorate: Inspection Services	Durban National Inspection Services Office
	D S Naidu	State Veterinarian and Manager Meat Inspection Unit		
	T S Sithole	Inspector		
	P T Tlapi	Inspector		
	C J Rubieparasad	Inspector		
	D H Jai Jai	Inspector		
	V Singh	Inspector		
	S l Biyela	Admin Staff		
	T S Zulu	Admin Staff		
	M A Ackerman	Admin Staff		
	M P Ntuli	Admin Staff		
Meeting with BCOCC (Border Control Operational Co-ordinating Committee) Representatives at Durban National Inspection Services Office				
9/10/12	S Soni	State Veterinarian and Manager Animal Quarantine Unit	DAFF Directorate: Inspection Services	Durban National Inspection Services Office
	D S Naidu	State Veterinarian and Manager Meat Inspection Unit		
	S Maelane	Manager Plant Inspection Unit		
	Robby van Dyk	Durban Harbour Port Co-ordinator	BCOCC	
	Barbara van Dyk	King Shaka International (KSI) Airport Co-ordinator	BCOCC	
Large Import / Export (EU Approved) Cold Storage Facility				
9/10/12	D S Naidu	State Veterinarian and Manager Meat Inspection Unit	DAFF Directorate: Inspection Services	Commercial Cold Store
	E Govender	Manager	Commercial Cold Store	
	A Khan	Quality Manager		
Small Pig Abattoir				
10/10/12	Mark Warren	DD: VPH KZN South	KZN DAE	Darnall Abattoir
	Steven Applesamy	Consultant	Darnall Abattoir	Darnall Abattoir
	Nic Robert	Owner	Darnall Abattoir	Darnall Abattoir
	Cookie	Manager	Darnall Abattoir	Darnall Abattoir
	Amanda Madlopha	Meat Inspector	IMQUAS	Darnall Abattoir
Local Stock Remedies Outlet				
10/10/12	Dumisani Mtshali	Manager VS: KZN North Region	KZN DAE	Stanger Co-op
	B Mavuso	State Veterinarian: Stanger	KZN DAE	
	?	Sales Assistant	Stanger Co-op	
Stanger Provincial SV Office				
10/10/12	Dumisani Mtshali	Manager VSs: KZN North Region	KZN DAE	Stanger Provincial SV Office
	Booyse Mavuso	State Veterinarian: Stanger	KZN DAE	
	P Mbewe	Control AHT	KZN DAE	
	T S Moseki	AHT	KZN DAE	
	M D Molete	AHT	KZN DAE	
	I D Letsolo	AHT	KZN DAE	
	T M Xhakaza	AHT	KZN DAE	
	M P Phudule	AHT	KZN DAE	
	K Lephogole	AHT	KZN DAE	

Rabies Project Presentation at Stanger Provincial SV Office				
10/10/12	Dumisani Mtshali	Manager Veterinary Services: KZN North Region	KZN DAE	Stanger Provincial SV Office
	Booyse Mavuso	State Veterinarian: Stanger	KZN DAE	
	Kevin le Roux	Control AHT and Rabies Manager	KZN DAE	
	Keith Perrett	State Veterinarian: Epidemiology	KZN DAE	
Jozini Provincial SV Office				
11/10/12	Dumisani Mtshali	Manager Veterinary Services: KZN North Region	KZN DAE	Jozini Provincial SV Office
	Lundi Ntantiso	State Veterinarian: Jozini	KZN DAE	
	L D Mosadi	Control AHT	KZN DAE	
	P Sishenge	AHT	KZN DAE	
	B J Sibiya	AHT	KZN DAE	
	N S Mpanza	AHT	KZN DAE	
	L P Mhlongo	Admin Clerk	KZN DAE	
Visit to Bambanani Quarantine Station and Ingwavuma Diptank				
11/10/12	Dumisani Mtshali	Manager Veterinary Services: KZN North Region	KZN DAE	Jozini Provincial SV Office
	Lundi Ntantiso	State Veterinarian: Jozini	KZN DAE	
	L D Mosadi	Control AHT	KZN DAE	
Jozini Stakeholders Meeting				
11/10/12	Dumisani Mtshali	Manager Veterinary Services: KZN North Region	KZN DAE	Jozini Provincial Satellite SV Office
	Lundi Ntantiso	State Veterinarian: Jozini	KZN DAE	
	Ndlovu	Committee Member	Local Communal Farmers Livestock Association	
	Nkosi	Committee Member		
Vryheid Provincial SV Office and (Satellite) Laboratory and VPH Section for KZN North				
12/10/12	Dumisani Mtshali	Manager Veterinary Services: KZN North Region	KZN DAE	Vryheid Provincial SV Office
	Jackie Cameron	State Veterinarian: Vryheid	KZN DAE	
	Carel Burger	Control AHT	KZN DAE	
	N Gous	AHT	KZN DAE	
	Nhamo Nyanhongo	State Veterinarian: Vryheid Laboratory	KZN DAE	
	Johan Nel	Veterinary Technologist	KZN DAE	
	Karin Nel	Veterinary Technologist	KZN DAE	
	Shashi Ramraj	State Veterinarian and Manager: VPH KZN North	KZN DAE	
	Mark Naicker	Control Meat Inspector	KZN DAE	
Hluhluwe Provincial SV Office				
12/10/12	Dumisani Mtshali	Manager Veterinary Services: KZN North Region	KZN DAE	Hluhluwe Provincial SV Office
	Jenny Preiss	State Veterinarian: Hluhluwe	KZN DAE	

Hluhluwe Stakeholders Meeting				
12/10/12	Dumisani Mtshali	Manager Veterinary Services: KZN North Region	KZN DAE	Hluhluwe Provincial SV Office
	Jenny Preiss	State Veterinarian: Hluhluwe	KZN DAE	
	P J Hazard	Farmer: Beef and Game	Local Farmers Association	
	G Tracy	Game Capturer and Farmer		
Closing meeting				
Same as opening meeting				

Appendix 4: Timetable of the mission and sites/ facilities visited

Date	Assessor	Time	Location	Activities
Monday 01/10	ALL	08 - 09 09 - 10 10 - 13 15 - 16 16 - 17	Pretoria (GP) Delpen (GP)	Courtesy meeting with the Deputy-Minister of AFF Opening meeting with VS Staff and Deputy Directors Review of itineraries Meetings with regard to : • Veterinary public health • Veterinary medicines and residues Chief-Director Inspection & Quarantine Director Animal Health and principal staff
Tuesday 02/10	ALL	08 - 17	Grasdak, Onderstepoort (GP)	Meetings with : • National reference laboratory (*Onderstepoort Veterinary Institute*, OVI) • *Onderstepoort Biological Products* (OBP) • Faculty of Veterinary Sciences (University of Pretoria) • Provincial office (Vredehuis)
Wednesday 03/10	ALL	 08 - 10 10 - 12 14 - 16 16 - 17	Grasdak, Onderstepoort (GP)	Meetings with : • Farmers organisations • Stakeholders organisations (industry…) • The *Veterinary Statutory Body* (SAVC) • Veterinary and vet para-professionals associations (SAVA)

Team 1 : Julia Punderson (JP) with Mpho Maja : North-West, Free-State and Gauteng provinces

Date	Distances	Time	Location	Activities
Thursday 04/10	310 km	07 - 09 09 - 12 13 - 17	Mmabatho (NW) Rustenburg (NW) Mafikeng (NW)	Drive from Pretoria to Mmabatho • Private Vet. Laboratory *(Rainbow Chickens)* • Provincial Veterinary Head Office (DARD)
Friday 05/10		08 - 09 09 - 10 10 - 13 14 – 17 17 - 18	Mafikeng (NW) Ramatlabama (NW) Zeerust (NW) Kopfontein (NW) Mafikeng (NW)	Drive to Ramatlabama • Ramatlabama B.I.P. with Botswana Drive to Zeerust • Abattoir and retail outlet (low throughput) • Provincial State Veterinary Office Drive to Kopfontein • Kopfontein B.I.P. with Botswana Drive to Mafikeng
Saturday 06/10		09 - 13 13 - 16	Mafikeng (NW) Potchefstroom (NW)	• Stock theft officer • Local farmers' and stakeholders organizations Drive to Potchefstroom

Sunday 07/10		08 - 12 12 - 15 15 - 19	Potchefstroom (NW) Jo'burg (GP) Bloemfontein (FS)	• Provincial Veterinary Laboratory • Provincial State Veterinary Office Drive from Potchefstroom to O.R. Tambo Int. Airport • O.R. Tambo Int. Airport Drive from O.R. Tambo to Bloemfontein • Consumers in Thaba'Nchu
Monday 08/10		07 - 10 10 - 11 11 - 12 14 - 16 16 - 17	Bloemfontein (FS) Bulfontein (FS) Bloemfontein	• Provincial Veterinary Head Office • Provincial Veterinary Laboratory • Domestic Airport (Bloemfontein) Drive to Bulfontein • Farm visit : site of the first RVF outbreak Drive to Bloemfontein
Tuesday 09/10		08 - 10 10 - 12 13 - 14 14 - 15 15 - 16 16 - 18	Thaba Nchu (FS) Maseru Bridge (FS) Ladybrand (FS) Ficksburg (FS) Clarens (FS)	• Provincial State Veterinary Office • Rural abattoir Drive to the Lesotho border at Maseru Bridge • Border Inspection Post Drive to Ladybrand • Provincial State Veterinary Office • Farmers' Co-op selling vet. drugs (under Act 36) Drive to the Lesotho border at Ficksburg Bridge • Border Inspection Post Drive from Ficksburg to Clarens
Wednesday 10/10		07 - 08 08 - 10 10 - 12	Clarens (FS) Bethlehem (FS)	Drive from Clarens to Bethlehem • Provincial State Veterinary Office • Stock theft officer • Farmers Associations Drive from Bethlehem to Welkom
Thursday 11/10		08 - 10 10 - 11 11 - 13 14 - 15 15 - 18	Welkom (FS) Kroonstad (FS) Sasolsburg (FS) Pretoria (GP)	• Abattoir / export facility (high throughput) • Provincial State Veterinary Office • Kroonstad Veterinary Laboratory • Fezile Dabi Municipal Vet. Services Office Drive to Pretoria
Friday 12/10		 09 - 11 11 - 13 15 - 17	 Jo'burg (GP) Heidelberg Ratunda (GP)	Drive to Johannesburg • O.R. Tambo Int. Airport - security office • Beef feedlot / abattoir • Cooperative poultry farm in informal settlement
Saturday 13/10		09 – 11 11 – 13 14 – 15 15 – 16	Jo'burg (GP) Pretoria (GP)	• O.R. Tambo Int. Airport - Border Inspect. Post • Kempton Park Quarantine Station • SAVA Headquarters Drive to Pretoria

Team 2 : John Stratton (JS) with Willie Ungerer and Grietjie de Klerk : Limpopo and Mpumalanga provinces.

Date	Distances	Time	Location	Activities
Thursday 04/10	300 km	07 - 11	Ellisras (Lephalale) L	Drive from Pretoria to Ellisras (Lephalale) : • Provincial State Veterinary Office • Lephalale Veterinary Laboratory
	200 km	12 - 14	Potgietersrus (Mokopane) L	Drive to Potgietersrus (Mokopane) : • Provincial Veterinary State Office • Provincial Veterinary Laboratory
	70 km	15 - 18	Polokwane (L)	Drive to Polokwane : • Provincial Veterinary Head Office; • Security services. • *Landmark* Agricultural Co-op selling vet. drugs (under Act 36)
Friday 05/10		08 – 09	Polokwane (L)	• Voerkrale Vencor cattle feedlot and abattoir (high throughput);
	200 km	09 – 11 11 – 13	Musina (L)	Drive to Messina (Musina) : • Travel along international border fence with Zimbabwe;
		14 – 17	Beitbridge (L)	• Beitbridge B.I.P. with Zimbabwe; • Buffalo farm
	40 km	17 - 18	Tshipise (L)	Drive to Tshipise
Saturday 06/10	180 km	08 – 13	Tshipise (L)	Drive to Messina (Musina) : • Drive from Messina eastwards along the Zimbabwe border ; • Dip tank in rural area and discuss with communal farmers; • Tzenzheni red line fence crossing between FMD vaccinated and non-vaccinated protection zone; • Madimbo Corridor and Limpopo River area relevant to transboundary FMD risk; • Travel along international border fence.
	80 km	14 - 18		Drive to Parfuri gate in the *Kruger National Park* (KNP)
Sunday 07/10		08 – 13	Parfuri (MP)	• Helicopter flight over the borders with Mozambique and Zimbabwe to view FMD risks from buffalo and cattle;
			Skukuza Camp	Drive to Skukuza (KNP) • State Veterinary Office (responsible for KNP): • Discuss wildlife disease situation in KNP.
Sunday 07/10	250 km	14 - 18	P.Maria Camp Phalaborwa (L)	Drive from Punda Maria Camp to Phalaborwa • Private veterinarian, Gerrit Scheepers
Monday 08/10		08 – 13	Phalaborwa (L)	• Dip Tank (Selwane) in rural area and meet and discuss with communal farmers; • Discussion with State Veterinarian • Discussion with Animal Health technicians for Tzanee and Letaba municipalities; • *Piet Warren* feedlot and abattoir; • Game farmers; • Provincial Veterinary Head Office.
	100 km	14 - 17	Orpen	Drive to Orpen in the *Kruger National Park* (KNP) • *Hans Hoheisen Wildlife Interface Research Facility*
Tuesday 09/10	30 km	08 – 11	Bushbuckridge (MP)	Drive from Orpen Camp to Bushbuckridge: • Provincial State Veterinary Office. • Dip tank in rural area and talks with communal

Date	Distances	Time	Location	Activities
				farmers; • KNP fences; • Meet with State Veterinary Office staff and discuss previous FMD outbreak area.
	100 km	11 – 16	Nelspruit (MP)	Drive to Nelspruit: • Provincial State Veterinary Office; • Local farmer's organisations and stakeholders (red meat producers, cattle farmers, defence/police, game hunters and wildlife services; • Security services.
	60 km	16 - 17	Malelane (MP)	Drive to Malelane
Wednesday 10/10	50 Km	08 - 13	Lebombo (KZN) Malelane (MP)	Drive to Lebombo : • Border Inspection Post with Mozambique • Veterinary quarantine camp • Farmers • Security services • Border fence with Mozambique • Research Station at Malelane.
Wednesday 10/10	60 km 50 km	14 - 18	Mananga (MP) Nkomasi (MP) Barberton (MP)	Drive to Mananga B.I.P. with Swaziland : • Border Inspection Post; • Border fence with Swaziland. • Provincial State Veterinary Office • MSD veterinary pharmaceutical research facility • Mauricedale game abattoir (low throughput) Drive to Barberton.
Thursday 11/10	180 km 150 km 100 km	08 – 11 11 – 16 16 - 18	Ermelo (MP) Sundra (MP) Pretoria (GP)	Drive to Ermelo : • Ermelo Veterinary Laboratory • Provincial State Veterinary Office • Research Station. • Private veterinarian • Emerging farmer Drive to Sundra : • Auction facilities • Pig farmers. Drive to Pretoria
Friday 12/10	80 km 180 km 100 km	08 – 10 10 – 14 15 - 16	Bela Bela (L) Rust de Winter Pretoria (GP)	Drive to Warmbaths (Bela-Bela) : • Crocodile products export facility. Travel to Rust de Winter (L) : • Private laboratory (Deltammune) Drive to Pretoria.
Saturday 13/10		08 - 17	Pretoria (GP)	• Data analysis and report writing

Team 3: Eric Fermet-Quinet (EFQ) with Phemelo Kegakilwe and Mariétta Bronkhorst : Western Cape and Northern Cape provinces

Date	Distances	Time	Location	Activities
Thursday 04/10		05 - 13	Kimberly (NC)	Drive to Johannesburg Fly from Johannesburg to Kimberley : • Head of Agriculture (Provincial Government) • Provincial Head Office in Kimberley • Provincial Veterinary Head Office • Stakeholders (RPO, NAFU, Wildlife Ranchers) • Private veterinarians • Provincial Veterinary Laboratory • Farmers' Co-op selling vet. drugs (under Act 36)
	250 Km	16 - 20	Kuruman (NC)	Drive to Kuruman : • Export red meat abattoir *(Beef Master)* • Co-ops and auctions market infrastructure • Small red meat abattoir • Provincial State Veterinary Office • Private veterinarian • Human pharmacy/chemist
Friday 05/10	800 km	07 - 10	Kuruman	• Meeting with farmers and stakeholders
		10 - 13	Tsineng (NC)	Drive to Tsineng • AHT office
		13 - 15	Middelputs (NC)	Drive to Middelputs • Border Inspection Post (no agriculture entrance)
		15 - 18	Gemsbok (NC)	Drive to Gemsbok (Port Noloth) • Meeting with wildlife authorities
		18 - 20	Upington (NC)	Drive to Upington • 2 private veterinary surgeries/clinics • Stock theft unit • Provincial State Veterinary Office
Saturday 06/10	650 Km	08 - 09	Upington (NC)	• Small milk distribution and pasteurization unit
		09 - 12	Pofadder (NC)	Drive to Pofadder • Rural abattoir
		14 - 15	Springbok (NC)	Drive to Springbok • Provincial State Veterinary Office
		15 – 16	Steinkopf (NC)	Drive to Steinkopf • Farmers representatives (commercial)
		16 - 17	Vioolsdrift (NC)	Drive to Vioolsdrift • Farmers meeting (communal / emerging)
		17 - 18	Port Noloth (NC)	Drive to port Noloth • Border Inspection Post (BIP) with Namibia
Sunday 07/10	650 Km	08 - 17	Saldanha (WC)	Drive to Saldanha • Production systems Drive to Cape Town
Monday 08/10	250 km	08 - 12	Elsenburg (WC)	Drive to Elsenburg • Provincial State Veterinary Office Western Cape
		12 – 16	Stellenbosch (WC)	Drive to Stellenbosch • Provincial Veterinary Laboratory Stellenbosch • Provincial Veterinary Head Office
		16 - 18	Cape Town	Drive to Cape Town

			(WC)	• Export quarantine Kenilworth / AHS zone • Private veterinarian
Tuesday 09/10	250 Km	08 - 18	Cape Town (WC) Swellendam (WC)	• Sea-port *Border Inspection Post* (BIP) • Import Quarantine station (Milnerton) Drive to Swellendam • Provincial State Veterinary Office
Wednesday 10/10	250 km	08 – 10 10 – 12 14 – 16 16 - 17	Swellendam (WC) Buffeljags-rivier (WC) Mossel Bay (WC) George (WC)	• Dairy farm (linked to export) • Export dairy (Parmalat) • Farmers' Co-op (AgriMart) Drive to Buffeljagsrivier • National dairy processor • Dairy farm (national market) • Ostrich farm Drive to Mossel Bay • AHT office • Ostrich abattoir • Human pharmacy Drive to George
Thursday 11/10	200 Km	08 - 12 14 - 18	George (WC) Oudtshoorn (WC)	• Small abattoir • Butchery linked with abattoir • AHS Equi-link association • Provincial State Veterinary Office • Farmers (big and small) • Communal farms Drive to Oudtshoorn • Small red meat abattoir • Ostrich chamber • Private veterinary laboratory (accredited) • Private veterinarian working for the ostrich and game industry
Friday 12/10	250 Km	09 – 13 14 - 17	Oudtshoorn (WC) Beaufort West (WC)	• Farmers' Co-op • Klein Karoo Ostrich Abattoir • Provincial State Veterinary Office Drive to Beaufort West • Satellite veterinary laboratory • Game farms • Ostrich products' shops
Saturday 13/10	600 Km	05 – 09 09 – 10 10 – 11 11 – 13 13 – 14 16 - 17 18 - 19	De Aar (NC) Kimberly (NC) Jo'burg (GP) Pretoria (GP)	Drive to De Aar • Provincial State Veterinary Office • Small ostrich farmer Drive to Kimberley • Domestic airport (Kimberley) Fly from Kimberley to Johannesburg Drive from Johannesburg to Pretoria

Team 4 : Emilio León (EL) with Tembile Songabe and Cornelia Gerstenberg : Eastern Cape and Kwazulu-Natal provinces

Date	Assessor	Hour	Place	Activities
Thursday 04/10	EL		Port Elisabeth (EC)	Drive to Johannesburg Fly from Johannesburg to P.E. : • Provincial State Veterinary Office • Border Inspection Posts (airport and port) • Local farmers' and stakeholders organisations
Friday 05/10	EL		Grahams town (EC) Camdeboo (EC) Graaff-Reinet (EC)	Drive to Grahamstown : • Provincial Veterinary Laboratory • Provincial State Veterinary Office Drive to Camdeboo • Game and ostrich meat abattoir (export to EU) Drive to Graaff-Reinet • Karoo taxidermy • Provincial State Veterinary Office • Local farmers' and stakeholders organizations
Saturday 06/10	EL		King William's Town (EC)	Drive to King Williams Town • Provincial State Veterinary Office • Local farmers' and stakeholders organizations
Sunday 07/10	EL		King William's Town (EC) Pietermaritzburg (KZN)	• Rural communal farming system / project • Local farmers' and stakeholders organizations Fly to Durban (KZN) Drive to Pietermaritzburg
Monday 08/10	EL		Pietermaritzburg (KZN) Durban (KZN)	Large beef abattoir and feedlot (Triple A Beef) Large poultry processing plant (Rainbow Chicken Food) Provincial Veterinary Head Office Provincial Veterinary Laboratory (Allerton) Local farmers' and stakeholders organizations Drive to Durban
Tuesday 09/10	EL		Durban (KZN)	Provincial State Veterinary Office Border Inspection Posts (airport and port) Commercial Cold Storage : EU approved import/export cold storage facilities
Wednesday 10/10	EL		Ilembe District (KZN) Stanger (KZN) Jozini (KZN)	Drive to Darnall: Small pig abattoir Drive to Stanger Local stock remedies outlet Provincial State Veterinary Office Discussion with the officer-in-chare of the rabies control programme in KZN province Drive to Jozini
Thursday 11/10	EL		Jozini (KZN) Vryheid (KZN)	Provincial State Veterinary Office Dip Tank : 2011 FMD outbreak zone in the north of KZN province, meeting with local farmers and visit of the quarantine station Drive to Vryheid
Friday 12/10	EL		Vryheid (KZN) Hluhluwe (KZN)	Provincial State Veterinary Office Vryheid Veterinary Laboratory Drive to Hluhluwe Provincial State Veterinary Office
Saturday 13/10	EL		Richard's Bay Johannesburg Pretoria (GP)	Drive to Richard's Bay (KZN) Fly from Richard's Bay to Johannesburg Drive from Johannesburg to Pretoria

Team is joined by OIE Observer Dr. P. Bastiaensen (OIE SRR-SA, Gaborone, Botswana)

Date	Assessor	Hour	Place	Activities
Sunday 14/10	ALL	09 - 22	Pretoria (Lynn-wood) GP	Data analysis and report writing
Monday 15/10	ALL	09 - 22	Pretoria (Lynn-wood) GP	Data analysis and report writing
Tuesday 16/10	ALL	09 - 24	Pretoria (Lynn-wood) GP	Data analysis and report writing
Wednesday 17/10	ALL	09 – 15 16 - 18	Pretoria (Lynn-wood) GP Delpen (GP)	Data analysis and report writing Preliminary meeting with CVO and AH director
Thursday 18/10	ALL	09 – 15 15 – 16 20 - 24	Pretoria (GP) Delpen (GP) Pretoria (Lynn-wood) GP	Wrap-up Final meeting Final meeting with Deputy Minister of Agriculture Report writing
Friday 19/20	ALL		Johannesburg (GP)	Departure of the team members

Appendix 5: Air travel itinerary

ASSESSOR	From	To	Flight No.	Departure	Arrival
EFQ	Lyon	Johanesburg	AF 990	29/09/12	30/09/12
	Johanesburg	Lyon	AF 991	19/10/12	20/10/12
JP	Washington	Johanesburg	SA 208	29/09/12	30/09/12
	Johanesburg	Washington	SA 207	19/10/12	20/10/12
JS	Cambera	Johanesburg	Q 101	28/09/12	30/09/12
	Johanesburg	Cambera	Q 102	19/10/12	20/10/12
EL	Buenos Aires	Johanesburg	LA 201	29/09/12	01/10/12
	Johanesburg	Buenos Aires	LA 200	19/10/12	20/10/12

Appendix 6: List of documents used in the PVS evaluation

E = Electronic version H = Hard copy version P= Digital picture

Ref	Title	Author / Date / ISBN / Web	Related critical competences
	PRE-MISSION DOCUMENTS		
E1	*Organogram DAFF*	VS, 2012	**I.6A**
E2	*Human demographic data*	VS, 2012	**Background**
E3	*Organogram Directorate AH*	VS, 2012	**I.6A, II.5A, II.5B, II.6, II.7**
E4	*E4 Organogram Directorate VQ&PH*	VS, 2012	**I.6A, II.4, II.8A, II.8B, II.8C**
E5	*Organogram Eastern Cape*	VS, 2012	**I.6A**
E6	*Organogram Free State*	VS, 2012	**I.6A**
E7	*Organogram Free State2*	VS, 2012	**I.6A**
E8	*Organogram Gauteng*	VS, 2012	**I.6A**
E9	*Organogram Limpopo*	VS, 2012	**I.6A**
E10	*Organogram Mpumalanga*	VS, 2012	**I.6A**
E11	*Organogram North West*	VS, 2012	**I.6A**
E12	*Organogram Northern Cape*	VS, 2012	**I.6A**
E13	*Organogram Western Cape AH*	VS, 2012	**I.6A**
E14	*Organogram Western Cape Food Safety & Exp*	VS, 2012	**I.6A**
E15	*Organogram Western Cape Lab*	VS, 2012	**I.6A**
E16	*Baseline info*	VS, 2012	**Background**
E17	*Livestock populations*	VS, 2012	**II.5A, II.5B, II.6, II.7, II.12A**
E18	*PP presentation on DAFF*	VS, 2012	**I.6A**
E19	*Reports to OIE*	VS, 2012	**II.5A, II.6, IV.6**
E20	*Disease outbreaksJanuary 2011*	VS, 2012	**II.5A, II.6**
E21	*Disease outbreaksMarch 2011*	VS, 2012	**II.5A, II.6**
E22	*Disease outbreaksMay 2011*	VS, 2012	**II.5A, II.6**
E23	*Disease outbreaksJune 2011*	VS, 2012	**II.5A, II.6**
E24	*Disease outbreaksJuly 2011*	VS, 2012	**II.5A, II.6**
E25	*Disease outbreaksSeptember 2011*	VS, 2012	**II.5A, II.6**
E26	*Disease outbreaksOctober 2011*	VS, 2012	**II.5A, II.6**
E27	*Disease outbreaksNovember 2011*	VS, 2012	**II.5A, II.6**
E28	*Abattoir List*	VS, 2012	**II.8A, II.8B**
E29	*Approved Labs List*	VS, 2012	**II.1A, II.1B**
E30	*Approved Tests for Validation List*	VS, 2012	**II.8A, II.8B**
E31	*Abattoirs approved for HidesSkins*	VS, 2012	**II.8A, II.8B**
E32	*Dairy establishments approved for export*	VS, 2012	**II.4, II.8A, II.8B**
E33	*Export HidesSkins Stores approved for export*	VS, 2012	**II.4, II.8A, II.8B**
E34	*Intermediate HidesSkins Stores approved*	VS, 2012	**II.4, II.8A, II.8B**
E35	*Meat Establishments for Export approved*	VS, 2012	**II.4, II.8A, II.8B**
E36	*Quarantines for Import & Export approved*	VS, 2012	**II.4**
E37	*Tanneries for Import & Export approved*	VS, 2012	**II.4, II.8A, II.8B**
E38	*Taxidermies for ImportExporta pproved*	VS, 2012	**II.4**
E39	*Other Products for Import & Export*	VS, 2012	**II.4**
E40	*Map 1 RSA in SADC*	VS, 2012	**Background**
E41	*Map 2 Provinces and Capitals*	VS, 2012	**Background**
E42	*Map 7 Vet Lab*	VS, 2012	**II.1A**
E43	*Map 8 Border posts, harbours and airports*	VS, 2012	**II.4**
E44	*Map 9 AHSControlZones*	VS, 2012	**II.5A, II5B, II.6, II.7**
E45	*Map 10 ASFControlZones*	VS, 2012	**II.5A, II5B, II.6, II.7**
E46	*Map 11 FMDControlZones*	VS, 2012	**II.5A, II5B, II.6, II.7**
E47	*FinalEU report 2011.2 NCRCP*	VS, 2012	**II.8C, II.10, IV.4**
E48	*National Residue Monitoring Program April 2011- March 2012*	VS, 2012	**II.8C, II.10**
E49	*Census on commercial agriculture 2007*	VS, 2012	**Background**
	MISSION DOCUMENTS		
H1	*Annual Report 2011/2012*	Onderstepoort Biological Products	**II.1**

		(OBP)	
H2	*The South African Veterinary System*	DAFF, Chief Director: Animal Production and Health	**I.6A**
H3	*Policy on Animal Disease Control*	DAFF	**II.5A, II.5B, II.6, II.7**
H4	*Procedures for obtaining Import/Export permit*	DAFF web page	**II.4, IV.4**
H5	*Report on the prevalence survey of Foot and mouth disease in the KwaZulu-Natal protection zone that was declared in June 2011*	DAFF	**II.5**
H6	*Risk Analysis on the importation of sheep and goats and genetic material from Scrapie positive conutries.*	DAFF	**II.3**
H7	*The Risk associated with the importation of Ethiopian Butter into South Africa*	DAFF	**II.3**
H8	*The Risk associated with importing pet rabbits into South Africa*	DAFF	**II.3**
H9	*Risk Analysis:importation of sable antelope from Zambia into South Africa*	DAFF	**II.3**
H10	*Risk review of Porcine Reproductive and Respiratory Syndrome virus (PRRSv) entering the Republic of South Africa via imported pork*	DAFF	**II.3**
H11	*Information Services to the public*	DAFF web page	**III.1**
H12	*Veterinary and Sustainable Resources Management Branch. Aniamal Health Regulatory Annual Report*	Department of Agriculture and Rural Development, Gauteng province	**II.5A, II.5B, II.7**
H13	*Standard procedure manual for the provide veterinary inspections and certificates for export process*	Department of Agriculture and Rural Development, Gauteng province	**IV.4**
H14	*Hygiene assessment system checklist: Poultry Abattoirs*	Department of Agriculture and Rural Development, Gauteng province	**II.8A**
H15	*Livestock: cadastral boundaries surveyed*	Department of Agriculture and Rural Development, Gauteng province	**II.5A, II.5B, II.7**
H16	*Design and evaluation of the 2009 national survey for disease freedom in the domestic pig population of South Africa*	M. de Klerk. Dissertation submitted to the Department of Production Aniaml Studies, Fac. Vet. Sci. – U. of Pretoria	**II.5A, II.5B, II.7**
H17	*DAFF Job Description; VPH Meat Inspector and annual work-plan*	DAFF 2012	**I.1A, I.1B**
H18	*DAFF Employee performance Agreement*	DAFF 2012	**I.2A, I.2B, II.8B**
H19	*List of red meat abattoirs- NW*	DAFF 2012	**II.8A, II.8B**
H20	*List of poultry abattoirs- NW*	DAFF 2012	**II.8A, II.8B**
H21	*Job description and competency profile- Dep. Director Provincial VPH*	DAFF 2012	**I.1A, I.2A, II.8B**
H22	*Job description and competency profile- Dep. Director Provincial epidemiology and Laboratory Services*	DAFF 2012	**I.1A, I.2A, II.1A**
H23	*Job description and competency profile- AHT*	DAFF 2012	**I.1B, I.2B**
H24	*Job description and competency profile- Assistant. Director Provincial VPH*	DAFF 2012	**I.1A, I.2A**
H25	*Job description and competency profile- control Veterinary technologist*	DAFF 2012	**I.1B, I.2B**
H26	*Organogram VPH NW Province*	DAFF 2012	**I.6A**
H27	*Rabies Information Pamphlet*	DARD-NW	**III.1**

H28	*Act 36; Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act of 1947; as amended*	DoA 1947	**II.9, II.11**
H29	*Act 36; Stock Remedies Regulation*	DoA 1947	**II.9**
H30	*SOPs for Routine Inspections, Investigations, Affidavits and Sampling*	DAFF 2006	**II.9, II.11**
H31	*Act 36; Functional operation plan*	DoA 1947	**II.9, II.11**
H32	*Act 36; complaint and inspection form*	DoA 1947	**II.9, II.11**
H33	*Act 36; Inspection Services-First Offense Form*	DoA 1947	**II.9, II.11**
H34	*Act 36; Sampling Form (yellow)*	DoA 1947	**I.9, II.11**
H35	*Act 36; Inspection Report example dated 2011 (farmers cooperative)*	DoA 1947	**I.9, II.11**
H36	*Act 36; Inspection Report example dated 2011 (pharmacy)*	DoA 1947	**I.9, II.11**
H37	*DAFF-IS; Structure and Background of Officials*	*DAFF-IS*	**IV.1, IV.4**
H38	*DAFF-IS Training Program, manual and Reports*	*DAFF-IS*	**I.3**
H39	*DAFF-IS Sops and Work Instructions*	*DAFF-IS*	**II.4**
H40	*DAFF-IS DEXCO Reports and Daily Stats*	*DAFF-IS*	**II.4, IV.4**
H41	*Animal Disease Act*	DAFF 20 Mar 1984	**IV.1, IV.2**
H42	*Animal Disease Regulations: amandment*	DAFF Sep 1998	**IV.1, IV.2**
H43	*Meat Safety Act of 2002*	DAFF; 1 Nov 2000	**IV.1, IV.2**
H44	*OBP Audit Report*	SABS; 20 July 2012	**II.2**
H45	*Bans imposed on SA trade due to FMD reactors 2011*	DAFF 2012	**IV.3, IV.5**
H46	*Letter of Approval for Compartments (swine) by Namibia*	Republic of Namibia; Ministry of Agriculture, Water and Forestry; Jan 2012	**IV.4, IV.5, IV.8**
H47	*Red Meat Abattoir Hygiene Assessment System Checklist; Gauteng province*	Dep Agr & Rural Develp., Gauteng prov.	**II.8A, II.8B**
H48	*Manual for the 2012 FMD Freedom Survey*	DAFF 2012	**II.5B**
H49	*FMD Survey Design Option*	DAFF 2012	**II.5B**
H50	*OBP Biologic Products*	OBP; undated	**II.7, II.9**
H51	*OVI Diagnostic Pricelist 2012/2012*	OVI 2012	**II.1A**
H52	*OBP Product Pricelist*	OVP 2012	**II.7**
H53	*DAFF Residue Monitoring and Control Program 2011/2012*	DAFF 2011	**II.10**
H54	*Directorate of Food Safety and Quality Assurance SOPs for product registration*	DAFF 1 Sep 2005	**II.8A, II.8B**
H55	*ARC Annual Report 2010-2011*	ARC 2012	**II.1A, II.1B**
H56	*PAHC and CCS Expenditure Framework*	DAFF, et. Al. 2011	**II.6, II.7**
H57	*DAFF Executive Summary of the Compulsary Communitary Service*	DAFF, undated	**II.6, II.7**
H58	*Veterinary and Para-Veterinary Professionals Amendment Bill*	DAFF; ISBN 978-1-77037-982-4	**I.1A, I.1B**
H59	*Resources of NW VS*	DARD NW 2012	**I.7**
H60	*Red Meat Regulations*	DAFF Sept 2004	**II.8A, II.8B, IV.1, IV.2**
H61	*Ostrich Regulations*	DAFF 2 Fed 2007	**II.8A, II.8B, IV.1, IV.2**
H62	*Animal Identification Act of 2002 and Regulations (21 Nov 2003; 8 Sep 2006; 25 Jan 2008)*	DAFF 2002 - 2008	**II.12A, IV.1, IV.2**
H63	*Residue Tolerances Regulations for the Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act of 1947*	DAFF *12 Feb 2010*	**II.10, IV.1, IV.2**
H64	*Act 19; Veterinary and Para-veterinary Processionals of 1982*	DAFF 1982	**I.1A, I.1B, III.5A, III.5B, IV.1, IV.2**
H65	*SPCA Act of 1993*	GoSA 1993	**II.13, IV.1, IV.2**
H66	*Animal Protection Act (No. 71 of 1962)*	GoSA 1962	**II.13, IV.1, IV.2**
H67	*Performing Animals Protection Act of 1935; as amended through 1991*	GoSA	**II.13, IV.1, IV.2**
H68	*NW University Mafikeng Faculty of Agriculture,*	NW University	**I.2B**

	Science, and Technology Course Offerings	2012	
H69	*NW University Mafikeng Faculty of Agriculture, Science, and Technology Graduation Statistics*	NW University 2012	**I.2B**
H70	*South African Veterinary Council statics*	SAVA 3 Oct 2012	**I.1A, I.1B, III.5A, III.5B**
H71	*Pandemic H1N1 Influenza Brochure*	DoH Free State	**III.1**
H72	*Free State Private movement certificate*	Free State RPO; undated	**II.12A**
H73	*Laboratory Internal Audit Form*	Kroonstad PVL; undated	**II.1A, II.1B**
H74	*Livestock census and map; Fezile Dabi District*	Free State VS; 2008	**II.5A, II.5B**
H75	*Fezile Dabi District- Free State organogram and assets*	Free State VS; July 2012	**I.6A**
H76	*DAFF Import Application; AGR 06/015*	DAFF; undated	**II.4**
H77	*Cabinet Memo regarding FMD audit and status*	DAFF 12/1/8/5/1	**II.5B, II.6, II.7**
H78	*South African Veterinary Council Brochure*	SAVA	**III.5A, III.5B**
H79	*Rift Valley Fever Information Flyer*	DAFF; undated	**III.1**
H80	*Safe Meat Brochure*	DAFF DVPH; 1996	**II.8A, II.8B, III.1**
H81	*Free State Veterinary Laboratory Fee Schedule- 2012-2013*	FS PVL; 2012	**II.1A**
H82	*Bloemfontein Veterinary Laboratory Quarterly Report; July – September 2012*	FR PVL; 2012	**II.1A**
H83	*Animal Identification Notice*	Dr. A Badenhorst; FS VS; 08/08/2012	**II.12A**
H84	*Veterinary Quarantine Notice*	Dr. A Badenhorst; FS VS; 08/08/2012	**II.7**
H85	*Resources; Thaba Nchu District Veterinary Office*	FS VS; 2012	**I.7**
H86	*Rabies Brochure*	DAFF	**III.1**
H87	*Information on Requirements for Permit to transport some productos out of South Africa*	Dep. of Environmental Affaires	**II.4, III.1**
H88	*Travellers' Guide*	DAFF	**II.4, III.1**
H89	*Brochure on Inspections done at ports of entry*	DAFF	**II.4, III.1**
H90	*Lines of reporting within VS*	Mpumalanga VS	**I.6A**
H91	*Hygiene assessment system checklist, for big abattoirs*	Limpopo VS	**II.8A**
H92	*Hygiene assessment system checklist, for small abattoirs*	Limpopo VS	**II.8A**
H93	*Request for importation permit*	DAFF	**II.4**
H94	*Information services to the public*	DAFF web site: www.gcis.gov.za	**III.1**
H95	*Profile of Limpopo sub-branch of Veterinary Services*	Limpopo VS	**I.6A**
H96	*Deltamune private lab's DAFF Accreditation*	DAFF	**II.1A, II.2**
H97	*Hygiene assessment system checklist, for poultry abattoirs*	Mpumalanga VS	**II.8A**
H98	*General structure of Mpumalanga VS*	*Mpumalanga VS*	**I.6A**
H99	*Leter from farmer assossiation to Mpumalanga VS*	Nico Pieterse	**III.3, III.6**
H100	*Rabies vaccination statistics*	Limpopo VS	**II.7**
H101	*Animal health monthly report*	Mogalakwena Municipality, Limpopo prov.	**II.5A, II.5B, II.6, II.7**
H102	*Rabies vaccination statistics*	Nkomo/Chokoe area, Limpopo prov.	**II.7**
H103	*Vet. Laboratory services: monthly report*	Limpopo prov.	**II.1A**
H104	*Veterinary and para-vet professions amendement bill*	DAFF	**I.1A, I.1B, IV.1, IV.2**
H105	*Certificate approval of the provincial vet lab*	DAFF	**II.1A, II.2, III.4**
H106	*Primary Animal Health Care and Compulsory Community Service Expenditure Framework*	DATT	**II.6, II.7**
H107	*Animal health quaterly report*	Mogalakwena	**II.5A, II.5B, II.6, II.7, II.12A,**

		Municipality, Limpopo prov.	**III.2**
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H185	*Set of data forms for ñonthly registration of ostrich stocks and movement of flocks from/on each registered ostrich farm etc…*	SAOBC	**II.12A, III.6, IV.8**
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P347	*Farmer and animal census at AHT suboffice*		**II.12A**
P348	*Sample registre at AHT suboffice*		**I.11, II.5A, II.5B**
P349	*Sampling form*		**II.5A, II.6**
P350	*Communal farmer register at AHT suboffice*		**II.12A**
P351	*Brand of cattle*		**II.12A**
P352	*Non agriculture border post*		**II.4**
P353	*Import certificate for cattle*		**II.4**
P354	*International heath certificate for dog*		**II.4**
P355	*Meeting with wildlife officers*		**I.6B**
P356	*Private vet clinic*		**I.1A**

P357	*Individual drug labeling*		**II.9**
P358	*Car of AHT*		**I.7**
P359	*Car of AHT*		**I.7**
P360	*Small milk pasteuritation shop*		**II.8C**
P361	*Small milk pasteuritation shop*		**II.8C**
P362	*Small milk pasteuritation shop*		**II.8C**
P363	*Small milk pasteuritation shop*		**II.8C**
P364	*Rural abattoir*		**II.8A**
P365	*State vet office*		**I.6A, I.7**
P366	*Poster on rabies*		**III.1**
P367	*Poster on NCD*		**III.1**
P368	*Communal farms*		**Background**
P369	*Communal farms*		**Background**
P370	*Terrestrial border inspection post*		**II.4**
P371	*Poster at border post*		**II.4, III.1**
P372	*Movement registration at border post*		**I.11, II.4**
P373	*Data management at border post*		**I.11, II.4**
P374	*SOP at border post*		**II.4**
P375	*External coodination meeting at border post*		**I.6B, II.4**
P376	*Road sign for AHS zoning*		**III.1, IV.7**
P377	*Farmer and animal census data management*		**I.11, II.12A**
P378 to P390	*Provincial lab*		**II.1B**
P391 to P400	*Export quarantine station*		**I.11, IV.4**
P401 to P410	*Import quarantine station*		**I.11, II.4**
P411	*Satellite lab*		**II.1B**
P414	*Quality management poster*		**III.1**
P415	*Rabies poster – Animal/human*		**I.6B, III.1**
P416to P421	*Farm medicine stock*		**II.9**
P422	*Residue testing by farmer*		**II.10**
P423	*Ostrich farm surveillance visit*		**II.5A, II.5B**
P424	*Meat inspection records*		**II.8B**
P425	*Meat inspection records*		**II.8B**
P426	*Meat inspection records*		**II.8B**
P427	*Condemnation certificates*		**II.8B**
P428	*Condemnation certificates*		**II.8B**
P429	*Poster on meat hygiene*		**II.8B, III.1**
P430	*Poster on meat hygiene*		**II.8B, III.1**
P431	*Small abattoir facility*		**II.8A**
P432	*Small abattoir facility*		**II.8A**
P433	*Small abattoir facility*		**II.8A**
P434	*Traceability on carcaces*		**II.12B**
P435	*Meat inspection*		**II.8B**
P436	*Meat inspection*		**II.8B**
P437	*Labeling meat*		**II.12B**
P438 to P446	*Meat procesing and distribution facilities*		**II.8B, II.8C**
P447	*Communal farms*		**Background**
P448	*Communal farms*		**Background**
P449	*Communal farms*		**Background**
P450	*Audit report of small abattoir*		**II.8A**
P451	*Registration of small abattoir*		**II.8A**
P452	*Registration of meat inspector*		**II.8B**
P453	*SA Ostich chamber*		**III.2, III.6**
P454	*Private accredited lab*		**I.2B**
P455	*State vet satellite lab*		**II.1B**
P456	*State vet satellite lab*		**II.1B**

P457	*Clinical service on remote state off*		**II.7**
P458	*Veterinary drug stock at state remote office*		**II.9**
P459	*Export game farm registration*		**IV.4**
P460	*Audit of export game farm*		**IV.4**
P461	*Audit of export game farm*		**IV.4**
P462	*Rabies poster*		**II.7, III.1**
P463	*Rabies poster*		**II.7, III.1**

Appendix 7: Organisation of the OIE PVS evaluation of the VS of South Africa

Assessors Team:

- Team leader: Dr Eric Fermet-Quinet
- Technical experts: Dr Julia Punderson, Emilio Leon, John Stratton
- Observer/Facilitator: Patrick Bastiaensen

References and Guidelines:

- Terrestrial Animal Health Code (especially Chapters 3.1. and 3.2.)
- OIE PVS Tool for the Evaluation of Performance of VS
  - → Human, financial and physical resources,
  - → Technical capability and authority,
  - → Interaction with stakeholders,
  - → Access to markets.

Dates: 1st to 19th October 2012

Language of the audit and reports: English

Subject of the evaluation: VS as defined in the Terrestrial Animal Health Code

- Not Inclusive of aquatic animals
- Not inclusive of other institutions / ministries responsible for activities of VS

Activities to be analysed: All activities related to animal and veterinary public health:

- Field activities:
  - → Animal health (epidemiological surveillance, early detection, disease control, etc)
  - → quarantine (all country borders),
  - → veterinary public health (food safety, veterinary medicines and biological, residues, etc)
  - → control and inspection,
  - → others
- Data and communication
- Diagnostic laboratories
- Initial and continuous training
- Organisation and finance
- Other to be determined…

Persons to be present: see provisional Appendix 3

Sites to be visited: see provisional Appendix 4

Procedures:

- Consultation of data and documents
- Comprehensive field trips
- Interviews and meetings with VS staff and stakeholders,
- Analyse of practical processes

Provision of assistance by the evaluated country

- Completion of missing data as possible
- Translation of relevant document if required
- Administrative authorisation to visit designated sites
- Logistical support if possible

Reports:

- Preliminary report will be presented at the closing session
- a report will be sent to the OIE for peer-review no later than one month after the mission
- the current levels of advancement with strengths, weaknesses and references for each critical competence will be described,
- general recommendations may be made in agreement with the VS.

Confidentiality and publishing of results

The results of the evaluation are confidential between the country and the OIE and may only be published with the written agreement of the evaluated country.