

PVS Evaluation Report

AUSTRALIA

Human, Physical
and Financial
Resources

Technical Authority
and Capability

Interaction with
Interested Parties

Access to Markets



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OIE PVS EVALUATION

REPORT OF THE

VETERINARY SERVICES OF

AUSTRALIA

26 October – 13 November 2015

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Disclaimer

This evaluation has been conducted by an OIE PVS Evaluation Team authorised by the OIE. However, the views and the recommendations in this report are not necessarily those of the OIE.

The results of the evaluation remain confidential between the evaluated country and the OIE until such time as the country agrees to release the report and states the terms of such release.

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List of acronyms, abbreviations and/or special terms

Acronyms are used very extensively in Australia. Only the most generally used acronyms are included in this list. Acronyms used only for a limited number of activities or specific actions are defined in the relevant texts.

Note - Website links are used extensively throughout this report and were functional at the time of writing. Given their nature, neither the OIE nor the Australian Veterinary Services can guarantee that these links will be functional or contain the same content into the future.

AAWS	Australia Animal Welfare Strategy
AAHL	Australian Animal Health Laboratory
AAO	Australian Government Authorised Officers
AAV	Australia Accredited Veterinarians
ABB	Animal Biosecurity Branch
ABIAB	Animal and Biological Import Assessments Branch
ABLV	Australian bat lyssavirus
ABS	Australian Bureau of Statistics
ACT	Australian Capital Territory
ACVO	Australian Chief Veterinary Officer
ACIAR	Australian Centre for International Agricultural Research
AEMIS	Australian Export Meat Inspection System
AHA	Animal Health Australia
AHC	Animal Health Committee
ALOP	Appropriate Level of Protection
AMRPC	Australian Antimicrobial Resistance Prevention and Containment (AMRPC) Steering Group.
ANQAP	Australian National Quality Assurance Program
APAV	Accreditation Program for Australian Veterinarians
APVMA	Australian Pesticides and Veterinary Medicines Authority
AQIS	Australian Quarantine and Inspection Service
AUSVETPLAN	Australian Veterinary Emergency Plan
AVA	Australian Veterinary Association
AVBC	Australian Veterinary Boards Council
AVN	Accredited Veterinary Nurse
AWB	Animal Welfare Branch
BAW	Biosecurity and Animal Welfare
BEF	Bovine Ephemeral Fever

BJD	Bovine Johne's Disease
BQ	Biosecurity Queensland
BSE	Bovine Spongiform Encephalopathy
BSL	Biosecurity Sciences Laboratory Queensland
BTV	Bluetongue virus
BVL	Berrimah Veterinary Laboratories, Darwin, Northern Territory
CAE	Caprine Arthritis–Encephalitis
CCEAD	Consultative Committee on Emergency Animal Diseases
Codex	Codex Alimentarius Commission
CPD	Continuing Professional Development
CRC	Cooperative Research Centre
CSB	Chemicals Services Branch
CSIRO	Commonwealth Scientific and Industrial Research Organisation
CSIRO-AAHL	Australian Animal Health Laboratory
CVO	Chief Veterinary Officer
DAFF	Department of Agriculture, Fisheries and Forestry, Canberra
DAFWA	Department of Agriculture and Food Western Australia
DAWR	Commonwealth Department of Agriculture and Water Resources
DEDJTR	Department of Economic Development, Jobs, Transport & Resources Victoria
DFAT	Department of Foreign Affairs and Trade
DPIF	Department of Primary Industry and Fisheries (NT)
EAD	Emergency Animal Disease
EADRA	Emergency Animal Disease Response Agreement
EI	Equine Influenza
EID	Emerging Infectious Disease
EMIA	Elizabeth Macarthur Agriculture Institute
EMP	Export Meat Program
EMSAP	Export Meat Systems Audit Program
ESCAS	Exporter Supply Chain Assurance System
EuFMD	European Commission for the Control of Foot-and-Mouth Disease
FAO	Food and Agriculture Organization of the United Nations
FMD	Foot-And-Mouth Disease
FSANZ	Food Standards Australia New Zealand
FSMA	Food Safety Meat Assessors
HACCP	Hazard Analysis and Critical Control Points

IGAB	Intergovernmental Agreement on Biosecurity
IRA	Import Risk Analysis
MAPs	Market Assurance Programs (MAPs)
MEVS	Meat Establishment Verification System
MICoR	Manual of Importing Country Requirements
MINTRAC	National Meat Industry Training Advisory Council
MPI	Ministry for Primary Industries
NAHIS	National Animal Health Information System
NAIWB	National Avian Influenza in Wild Birds Surveillance Program
NAMP	National Arbovirus Monitoring Program
NAQS	Northern Australia Quarantine Strategy
NASP	National Arbovirus Surveillance Program
NATA	National Association of Testing Authorities
NBC	National Biosecurity Committee
NBPSP	National Bee Pest Surveillance Program
NLIS	National Livestock Identification System
NMG	National Management Group
NSDIP	National Significant Disease Investigation Program
NSW	New South Wales
NSW DPI	New South Wales Department of Primary Industries
NT	Northern Territory
NTSESP	National Transmissible Spongiform Encephalopathies Surveillance Program
NVD	National Vendor Declaration
NZ	New Zealand
OIE	World Organisation for Animal Health
OIE PVS	OIE Performance of Veterinary Services Evaluation Tool
OIE TAHC	OIE Terrestrial Animal Health Code (“the Code”)
OLAF	European Anti-Fraud Office (<i>French acronym</i>)
OPV	On-plant veterinarian
PAMI	Porcine Ante-mortem Inspectors
PEQ	Post-entry Quarantine
PIRSA	Primary Industries and Regions South Australia
POO	Property of Origin
QA	Quality Assurance
QLD	Queensland

QGIAS	Queensland Government Internal Audit Service
R&D	Research and Development
RABQSA	Registrar Accreditation Board and the Quality Society of Australasia
RD&E	Research, Development and Extension
RSPCA	Royal Society for the Prevention of Cruelty to Animals
SA	South Australia
SCAHLs	Sub-Committee on Animal Health Laboratory Standards
SEA	South-East Asia
SEACFMD	South East Asia and China Foot and Mouth Disease program
SPS Agreement	Agreement on the Application of Sanitary and Phytosanitary Measures
STANDZ	Stop Transboundary Animal Diseases and Zoonoses program
SWF	Screw-Worm Fly
SWFFAP	Screw-worm Fly Freedom Assurance Program
TAFE	Technical and Further Education
TAS	Tasmania
TFC	Tick Fever Centre
TRACE	Tracking Animal Certification for Export
TSE	Transmissible Spongiform Encephalopathy
TSEFAP	Transmissible Spongiform Encephalopathy Freedom Assurance Program
UK	United Kingdom
WA	Western Australia
WHA	Wildlife Health Australia
WHO	World Health Organization
WTO	World Trade Organisation
VIC	Victoria
VS	Veterinary Service(s)
VPH	Veterinary Public Health
VNCA	Veterinary Nurses Council of Australia
VSAAC	Veterinary Schools Accreditation Advisory Committee
VSB	Veterinary Statutory Body (see OIE Code definition)

Acknowledgements

The use of the OIE PVS Tool for evaluation purposes by Dr Herbert Schneider (Team leader) and Drs Howard Batho, Barry Stemshorn and Alex Thiermann (hereinafter called the “Team”) has been formally authorized by the OIE.

The Team wishes to express their appreciation and gratitude to the Commonwealth Department of Agriculture and Water Resources and the respective Departments in all States and Territories of Australia for their full support, logistical assistance and willingness to provide all information needed in a frank, cooperative and transparent manner. The timely provision of detailed and comprehensive baseline data information by the Australian Government and all jurisdictions greatly facilitated the preparation and execution of the OIE PVS Evaluation. Likewise the Team wishes to thank all Federal and State Offices and Agencies in all jurisdictions visited for their cooperation, assistance and excellent presentations to facilitate the evaluation within the limited time available. The frank and open discussions and assistance accorded to the Team by private sector representatives greatly contributed to the evaluation efforts, understanding of the inter-sectoral relationships and their specific needs. This was of particular value given the federal structure of government in Australia. The Team was impressed by the professionalism and dedication by all persons met and interviewed to their respective fields of responsibility and duties and commitment to the biosecurity of Australia.

A special word of thanks is accorded to Dr Mark Schipp, Australian Chief Veterinary Officer and OIE Permanent Delegate and all Chief Veterinary Officers of the States and Territories of Australia, Dr John Stratton for the in-depth preparation of the mission’s activities, assisted by Dr Carol Sheridan and Ms Michelle Hyde, who also, as Australian resource persons for the mission, accompanied the team on all visits and acted as valuable resource persons.

PART I: EXECUTIVE SUMMARY

I.1 Introduction

Following a request to the OIE from the Government of Australia, an evaluation of the Veterinary Services based on the *OIE PVS (Performance of Veterinary Services)* methodology was conducted from **26th October to 13th November 2015** by a team of four independent OIE certified PVS assessors.

The evaluation began on 26th October 2015 in Canberra, with meetings with the Australian Chief Veterinary Officer and senior staff in the Canberra headquarters of the Department of Agriculture and Water Resources, followed by meetings with all relevant Divisions, Branches and Agencies. An introductory visit was paid to the Secretary of Agriculture, Mr Daryl Quinlivan.

The OIE PVS Team (“the Team”) visited sites and institutions (public and private sector) in cities and rural areas of **all States and Territories of Australia** and discussed relevant matters with the different jurisdictions, government officials, public and private sector veterinarians and veterinary paraprofessionals, livestock producers, traders, consumers and other stakeholders.

The mission concluded in Sydney on 13th November 2015 with a closing meeting involving the ACVO and members of the national Animal Health Committee (AHC) at which the overall findings of the evaluation were discussed.

I.2 Key findings and recommendations of the evaluation

Australian farmers and agribusinesses are highly reliant on export markets to sell their produce. 58 per cent of Australia’s total food production is sold to overseas consumers. Agricultural exports generate 70 per cent of the value for the sector. This reliance on exports requires continual production and value increases. Australia’s modest population and gradual consumption growth leads many Australian farmers to depend on new international markets to expand and maintain profitability¹. A high animal health and food safety status to protect the export sector is thus of cardinal importance for Australia.

The OIE PVS Evaluation of Australia is the first in a highly developed country. The evaluation results highlight Australia’s extraordinary commitment to biosecurity, serving their national interests by maintaining their high animal health status. The very high level of biosecurity is founded on strong partnership collaboration and formal business arrangements amongst jurisdictions and with the private sector, including primary producers, processors, suppliers of inputs and laboratories. This high national biosecurity level is also well founded by a robust Risk Analysis Unit with transparent results, published in their dedicated website. In addition, the evaluation results emphasise Australia’s leadership role in the international veterinary community, building respect and understanding of Australia’s high animal health status and veterinary capability.

A key biosecurity strategy involves, inter alia, dedicated facilities and operations for border security and emergency response. Efficiencies in biosecurity are being gained by shifting the emphasis from response to prevention of biosecurity risks.

Raising the capacity on animal health and welfare within the South East Asian region, moves risk management offshore and thereby improves the cost-benefit ratio for animal health. This strategy is supported by a strong commitment and participation in international standard setting.

¹ <http://www.futuredirections.org.au/publications/food-and-water-crises/2022-australia-s-food-export-outlook.html>

The Team noted effective – and transparent – communication, consultation and coordination with stakeholders at all levels at Commonwealth and jurisdictional levels.

The Veterinary Service at Commonwealth, as well as at State and Territory level, benefits from the expertise and dedication from its personnel, based on an excellent education system and a comprehensive and effective continuing education system.

Formal and detailed coordination mechanisms of veterinary services at Commonwealth and jurisdictional level with other Government institutions such as the Department of Health and Food Standards Australia New Zealand (FSANZ), ensure a high level of food safety.

The following provides a summary of the key findings and recommendations of the OIE PVS Evaluation of the Veterinary Services of Australia.

1.2.A Human, physical and financial resources

- **Staffing**

It was highlighted that staff levels in some jurisdictions are not just stretched for emergencies but they are stretched now and these services are managing to cope because they are prioritising work and some work is not being carried out fully or at all. In several jurisdictions staff levels are seen as severely inadequate.

Concerns regarding staffing reductions have been raised by various sources including some Chief Veterinary Officers, industry leaders, private veterinarians and the Australian Veterinary Association. The Team noted a wide variation in the levels of staffing across the jurisdictions. Currently adequate staff resources in some jurisdictions should be used for guidance in order to improve staffing in jurisdictions which have been subjected to staff reductions and thereby resulting in reduced services delivery.

The Team noted that in one jurisdiction consolidation to a single state laboratory and improved courier services had resulted in a more efficient service. However in other jurisdictions private veterinarians expressed concerns about increasing costs and delays in the laboratory services required for effective surveillance. There are some difficulties as well in providing veterinary cover in remote areas. Areas of reduced rural laboratory services occur in some jurisdictions.

Staffing levels may seem to be appropriate during “peace time” but this is because of prioritisation of work and may be stretched beyond their limits in case of animal disease emergencies. These reports on staffing have been validated by some State Auditors General and are consistent with documented reductions in operational funding from jurisdictions and increased reliance on the private sector for core functions.

The Team noted that veterinary para-professionals are performing a multitude of different tasks in the VS which, however, have not been defined by the relevant State / Territory Veterinary Board for authorisation for the purposes of the OIE Terrestrial Animal Health Code Chapter 3, article 3.2.12.

The Team were very impressed with the extremely high level of competence, professionalism and motivation of the veterinarians and other staff met during the mission.

Recommendation:

- There should be an in depth evaluation of staffing levels of veterinarians and veterinary para-professionals at jurisdiction level, with particular attention to emergency animal disease response capability and essential “peace time” responsibilities like e. g. surveillance and traceability functions.

- **Funding**

Direct funding from industry is very important to the jurisdictions but there is wide variation between them from levels of more than 40% to 0% industry funding. This presents a situation where there is a risk that Industry could be forced to withdraw its funding if faced with severe market or production setbacks. There are also differences in funding for endemic diseases varying from 100% to 0%. There is a possible risk of over-reliance on the private sector in some jurisdictions or for some veterinary aspects and room for greater contributions from industry in others. An appropriate balance in private-public funding should be assured.

Recommendations:

- An in depth review of resourcing levels and strategies is recommended to complement the review of staffing levels at jurisdiction level recommended under CC I-1A.
- Examples of successful funding mechanisms by some jurisdictions (e.g. NSW) through targeted animal health levies may be considered for broader application.

- **Conflict of interest**

High reliance on private sector funding and direct employment of inspectors by entities being inspected creates at least perceived conflicts of interest.

Such potential for conflict of interest were specifically noted in the provision of ante- and post-mortem examinations at Australia non-export approved meat abattoirs, as well as for pig and poultry meat abattoirs and processing establishments. Direct employment of inspectors by operators may and can result in a potential conflict of interest.

Australian Government Accredited Veterinarians (AAVs) involved in export of live animals and contracted by the private sector creates a perceived conflict of interest, even if they are partly supervised by an official veterinarian.

Recommendation:

- Institute administrative measures to reduce possible conflicts of interest.

- **Chains of command**

Chains of command are not all linear. Some operate through a variety of matrix structures at national and jurisdictional levels. Several arrangements are in place to coordinate work done through the separate chains of command of the Commonwealth and State/Territory jurisdictions. The Australian Chief Veterinary Officer, as the Australian technical lead in national and international fora for animal health and veterinary public health, should have adequate line of sight, authority and resourcing to provide technical leadership, oversight and direction across Australia's veterinary services as appropriate.

1.2.B Technical authority and capability

- **Laboratories and data systems**

A network of world-class animal health laboratories is operated by the Australian Commonwealth, state and territory governments, CSIRO, veterinary schools and the private sector. This network provides diagnostic and research services for endemic and exotic animal diseases, including transboundary animal diseases and zoonoses. CSIRO-AAHL and some jurisdictional laboratories also serve as national and/or OIE

reference laboratories for specific EADs, providing in depth investigational and research capacities, as well as training. State of the art facilities reflect a commitment to preparedness for possible animal disease threats.

The AHC Sub-Committee on Animal Health Laboratory Standards (SCAHLs) until recently served as the national network for animal and veterinary public health laboratories in Australia. The OIE PVS Team heard many comments about the valuable role performed by SCAHLs and the need for this work to continue. It notes that AHC has committed to develop alternative arrangements to ensure that national laboratory standards are maintained and that experts who provide laboratory-related advice on Australia's national animal health system come together as needed.

There are very good data systems at national and jurisdictional levels; however a need exists for improved compatibility and data exchange/access. Currently mapping systems between jurisdictions may not be fully compatible. There is a need to agree, resource and implement a formal process to ensure this happens.

Recommendations:

- Functions previously performed by SCAHLs were essential and should continue.
- Progress on-going inter-operability activities between Commonwealth and jurisdictional data bases.

• **Biosecurity and Emergency Animal Disease Response**

The Team noted that present staff numbers may limit rapid responses to sanitary emergencies. In some jurisdictions the decline in financial and staff resourcing for core biosecurity functions has weakened their capacity to effectively carry out surveillance work, detect, prepare for and respond to an emergency animal disease outbreak.

The Team was informed that although private veterinarians are perceived to be a vital link in biosecurity and emergency response plans, their participation in emergency response, although laid down on paper, is not enforceable and could be lacking, thereby creating a weak link in the surveillance and response system.

The cut-back in funding for pre-border biosecurity activities in neighbouring South-East Asia countries creates a definite weakness regarding emergency preparedness.

There are excellent preparedness plans and in emergency situations the chain of command is adjusted by adoption of an incident command structure at Commonwealth and certain jurisdictional levels. However currently mapping systems between jurisdictions may not be fully compatible or there is not an efficient mechanism to share data in consistent forms that would allow for national mapping e.g. if there was a multi-jurisdictional outbreak.

Recommendations:

- Develop strategies to maximise the availability of private veterinarians for assistance during emergency animal disease responses.
- Develop inter-operability of jurisdictional mapping and/or data sharing systems for emergency response.
- Finalise development and put into operation a national emergency data management system or interface (working with Victoria's emergency management software "MAX" or other systems as required) to allow information from jurisdictions, as per the Commonwealth and jurisdiction's commitment under the Intergovernmental Agreement on Biosecurity (IGAB).

This *Data Warehouse* would allow the exchange of information in a consistent form with jurisdictions during an emergency animal disease event for national reporting purposes.

- There should be an in depth evaluation of staffing levels needed in jurisdictions for rapid response purposes and strategies developed to address identified gaps.

- **Veterinary medicines and biologicals**

The Team was informed by some jurisdictions that instances of non-compliance with prescribing and dispensing directives occurred. As such actions could result (and have resulted) in disciplinary procedures by the respective Veterinary Surgeons Board, the Team recommends involvement of all relevant authorities to address possible system weaknesses. (see also **CC.III-5**).

Recommendation:

- The Team recommends that relevant authorities take note of and implement relevant governance activities in terms of OIE Code Chapter 6, article 6.9.6 which deals with “Responsible and prudent use of antimicrobial agents in veterinary medicine” *and provides guidance with the aim of protecting both animal and human health as well as the environment. It defines the respective responsibilities of the Competent Authority and stakeholders such as the veterinary pharmaceutical industry, veterinarians, animal feed manufacturers, distributors and food animal producers who are involved in the authorisation, production, control, importation, exportation, distribution and use of veterinary medicinal products (VMP) containing antimicrobial agents.*
- All relevant authorities (including government agencies at the national and jurisdictional level, and VSBs) should address system weaknesses with regard to prescribing and dispensing of veterinary medicinal products.

- **Ante and post mortem inspection**

Ante- and post-mortem veterinary inspection for meat destined for export (and the majority of meat destined for the domestic market) operates under the Australian Export Meat Inspection System (AEMIS).

Under AEMIS, a DAWR veterinarian is responsible for ante-mortem inspection and verification of post-mortem inspection and processor hygiene practices. Inspection services are delivered either by DAWR officials or Australian Government Authorised Officers (AAOs), who can be employed by the establishment or contracted by the establishment from a DAWR approved third party service provider. All meat inspectors in export registered red meat establishments are under the direct supervision of the government (in plant) veterinarian.

An ‘Independent Employer of AAOs Accreditation Scheme’ was established to avoid any perception of conflict of interest in relation to the engagement of meat inspectors.

Australian domestic production arrangements for meat establishments are based on the Australian Standard for the Hygienic Production and Transportation of Meat and Meat Products for Human Consumption (AS4696) (the Australian Standard). These establishments are regulated by the Australian States and Territories. Where some small volume exports of red meat and poultry from this arrangement occur that are permitted by importing countries, DAWR conducts auditing oversight and verification to ensure certification integrity. The Australian Standard does not require government-employed veterinarians to be on-site at domestic meat establishments,

rather, domestic meat establishments are permitted to employ their own meat inspectors. Lack of an on-site veterinarian may compromise passive animal disease surveillance capability in the abattoirs producing only for the domestic market.

Australia Standard 4465:2005 for poultry abattoirs does not require on site veterinary officers or meat safety inspectors to be present during processing operations.

Recommendation:

- For the Australian domestic production arrangements, investigate administrative measures to enable the Veterinary Authority, in accordance with article 3.2.9.1 of the OIE Code, to provide guarantees of responsibility for an effective control of the sanitary status of animal products throughout the slaughter, processing, transport and storage periods. In particular, ensuring sufficient veterinary oversight and addressing potential conflict of interest with inspection arrangements in the domestic abattoirs should be investigated and thereby ensuring passive animal disease surveillance capability.

- **Animal Feed Safety**

The Team noted the limited authority of jurisdictions to regulate feed safety in the absence of national animal feed standards. There is a draft national animal feed standard which has been in preparation for 10 years.

Recommendation:

- As a priority support the completion of the Draft National Animal Feed Standards and incorporate them into jurisdictional regulations.

- **Traceability and movement control**

In general there are excellent identification systems to trace animal history, location and distribution for purposes of animal disease control, food safety, and trade. The management of NLIS benefits the producer from the information generated. There is a need to ensure adequate resourcing of jurisdictional oversight and compliance activities relating to traceability to ensure the system remains robust and consistent across Australia.

However efficient traceability in sheep is lacking at the moment and it is hoped that electronic identification will become the norm as soon as possible. It was highlighted that tracing of sheep via sale yards was difficult and time-consuming. In addition the cattle industries have spent a lot of money on developing a very good system which could be jeopardised by lack of an efficient tracing system for sheep. There has been a review on this and the recommendation was that the present system has to be improved.

The identification and traceability of products of animal origin is managed under the Food Standards Code, developed and managed by Food Standards Australia New Zealand (FSANZ) and ensures good traceability and efficient recalls.

Recommendation:

- Implement efficient traceability of sheep and monitor cross-jurisdictional movements for improved compliance.

- **Animal welfare**

There is no welfare legislation at national level and each jurisdiction has its own legislation and is responsible for compliance. DAWR supports the development of animal welfare standards and guidelines for a range of production animals and also

sees this as important to protect its export markets. There are systems in place to ensure welfare standards for transport and slaughter in countries importing livestock animals from Australia are met.

The OIE collaborating Centre on Animal Welfare and Bioethics involves both Australia and New Zealand and there is a focal point for animal welfare at the federal level. It was noted in one jurisdiction, the OIE Focal Point for Welfare system was unknown and therefore there was no link by the jurisdictional animal welfare division to the Australian Government OIE focal point.

Recommendation:

- Re-engagement of DAWR in the Australian Animal Welfare Strategy (AAWS) was a definite need expressed to the Team at jurisdictional level and should be further pursued.
- Enhance involvement of OIE National Focal Point for Animal Welfare at jurisdictional levels.

1.2.C Interaction with interested parties

- **Veterinary Statutory Body**

Except for Western Australia, no veterinary statutory body (VSB) in the jurisdictions regulates any identified group of veterinary paraprofessionals.

The OIE Terrestrial Animal Health Code defines a VSB as an autonomous regulatory body. Appointment procedures for board members in several jurisdictions indicate a dominance of ministerial appointees, which, in the opinion of the Team, may affect the board's autonomy and decision making.

The Team noted in some jurisdictions that limited human and financial resources impact on VSB service capacity. Wide variations were noted in the application of disciplinary measures, licensing procedures and targeted veterinary establishments.

Recommendations:

- Investigate the identification and registration of veterinary paraprofessionals in accordance with the OIE Terrestrial Animal Health Code definition, *....being 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 in accordance with need (end of quote)*².
- Address possible lack of autonomy by revisiting the legal framework for board membership and appointment provisions at all State and Territory Veterinary Boards.
- Review capacities for institutional management and application of disciplinary measures at all jurisdictional VSBs. The responsible and prudent use of antimicrobial agents in veterinary medicine is a very important responsibility of veterinarians (see Chapter 6.9, article 6.9.6. of the OIE Terrestrial Animals Health Code) and VSBs are strongly encouraged to issue applicable prescribing and dispensing guidelines to veterinarians and provide for disciplinary actions in cases of non-compliance.

² E.02.2

- Investigate administrative differences between jurisdictions concerning action on reports of professional malpractice, temporary suspensions and termination of registration.

1.2.D Access to markets

- **Legislation**

As Australia has a federal system, each jurisdiction sets down its own specific legislation following the requirements laid down in the Constitution. However, jurisdictions may not enact similar legislation at the same time which causes implementation difficulties. The new Biosecurity Act 2015 shows the high level of quality of drafting of legislation in Australia. The proposed national animal feed standards have been under development for a decade, delaying the development of legislation at jurisdictions.

- **Equivalence and other types of sanitary agreements**

There are equivalence agreements that have been negotiated by Australia in food safety, live animals and genetic material. It was recognised that for animal health/biosecurity risks from live animal and genetic material imports equivalence arrangements could be more difficult to reach given Australia's high animal health status. Aside from the equivalency agreement on Food Safety between Australia and New Zealand, there are other equivalency or trade arrangements between Australia and other countries, relating to sanitary aspects of commodities being imported.

- **Zoning**

The application of the concept of zoning to control several animal diseases is well managed through active consultation and collaboration between the public and private sector. In certain jurisdictions there are three cattle tick declared zones: free, control and infected. These programs are currently under review. Similarly the bovine Johne's disease control program and its current system of zoning is presently under review including via public consultations. Preparedness for the use of zoning during emergency animal disease outbreaks is being explored.

Recommendation:

- Review the national management of cattle ticks.
- Continue to explore preparedness for the use of zoning during emergency animal disease outbreaks.

TABLE 1: Summary of OIE PVS evaluation results

PVS summary results of AUSTRALIA	Result
I. HUMAN, PHYSICAL AND FINANCIAL RESOURCES	
I.1.A. Staffing: Veterinarians and other professionals	5
I.1.B. Staffing: Veterinary paraprofessionals and other	5
I.2.A. Professional competencies of veterinarians	5
I.2.B. Competencies of veterinary paraprofessionals	4
I-3. Continuing education	5
I-4. Technical independence	4
I-5. Stability of structures and sustainability of policies	5
I-6.A. Internal coordination (chain of command)	4
I-6.B. External coordination	5
I-7. Physical resources	5
I-8. Operational funding	4
I-9. Emergency funding	5
I-10. Capital investment	5
I-11. Management of resources and operations	5
II. TECHNICAL AUTHORITY AND CAPABILITY	
II-1.A. Access to veterinary laboratory diagnosis	5
II-1.B. Suitability of national laboratory infrastructures	5
II-2. Laboratory quality assurance	5
II-3. Risk analysis	5
II-4. Quarantine and border security	5
II-5.A. Passive epidemiological surveillance	5
II-5.B. Active epidemiological surveillance	5
II-6. Emergency response	5
II-7. Disease prevention, control and eradication	5
II-8.A. Regulation, authorisation and inspection of establishments	5
II-8.B. Ante and post mortem inspection	3
II-8.C. Inspection of collection, processing and distribution	5
II-9. Veterinary medicines and biologicals	5
II-10. Residue testing	5
II-11. Animal feed safety	3
II-12.A. Animal identification and movement control	5
II-12.B. Identification and traceability of animal products	5
II-13. Animal welfare	5
III. INTERACTION WITH INTERESTED PARTIES	
III-1. Communications	5
III-2. Consultation with interested parties	5
III-3. Official representation	5
III-4. Accreditation/authorisation/delegation	5
III-5.A. Veterinary Statutory Body Authority	3
III-5.B. Veterinary Statutory Body Capacity	5
III-6. Participation of producers and other interested parties in joint programmes	5
IV. ACCESS TO MARKETS	
IV-1. Preparation of legislation and regulations	5
IV-2. Implementation of legislation and regulations and compliance thereof	5
IV-3. International harmonisation	5
IV-4. International certification	5
IV-5. Equivalence and other types of sanitary agreements	3
IV-6. Transparency	5
IV-7. Zoning	5
IV-8. Compartmentalisation	NA*

*NA Not applicable at this stage

PART II: CONDUCT OF THE EVALUATION

At the request of the Government of Australia, the Director General of the OIE appointed an independent OIE PVS team consisting of Dr Herbert Schneider (Team Leader) and Drs Howard Batho, Barry Stemshorn and Alex Thiermann (Technical experts) to undertake an evaluation of the veterinary services of Australia.

The evaluation was carried out from 26th October to 13th November 2015 and all states and territories were visited.

The evaluation was carried out with close reference to the OIE standards contained in Chapters 3.1., 3.2., 3.3. and 3.4. of the OIE Terrestrial Animal Health Code (the Terrestrial Code), using the OIE PVS Tool (6th edition, 2013) to guide the procedures. Relevant Terrestrial Code references are quoted for each critical competency in Appendix 1 of Part V.

This report identifies the strengths and weaknesses of the veterinary services of Australia as compared to the OIE standards. The report also makes some general recommendations for actions to improve performance.

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

To assist countries to establish their current level of performance, form a shared vision, establish priorities and carry out strategic initiatives, the OIE has developed an evaluation tool called the OIE Tool for the Evaluation of Performance of Veterinary Services (OIE PVS Tool³) 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 PVS Team to help determine the level of advancement.

A glossary of terms is provided in Appendix 2 of Part V.

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.

³ Available at http://www.oie.int/eng/oie/organisation/en_vet_eval_tool.htm?e1d2

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

II.2.A Geography

MAP 1: Australia



Australia comprises a land area of almost 7.7 million square kilometres (sq km). The bulk of the Australian land mass lies between latitudes 10 degrees 41 minutes (10°41') south (Cape York, Queensland) and 43°38' south (South East Cape, Tasmania), and between longitudes 113°09' east (Steep Point, Western Australia) and 153°38' east (Cape Byron, New South Wales). The latitudinal distance from Cape York to South Point is about 3,180 kilometres (km), and to South East Cape 3,680 km, while the longitudinal distance between Steep Point and Cape Byron is about 4,000 km⁴.



⁴ E. 01.4

TABLE 2: Area, Coastline, Tropical and Temperate Zones

	Estimated area		Length of coastline (a) km	Proportion of total area	
	Total	Total area		Tropical zone	Temperate zone
	sq km	%		%	%
New South Wales	800 642	10	2 137	..	100
Victoria	227 416	3	2 512	..	100
Queensland	1 730 648	23	13 347	54	46
South Australia	983 482	13	5 067	..	100
Australia					
Western Australia	2 529 875	33	20 781	37	63
Tasmania	68 401	1	4 882	..	100
Northern Territory	1 349 129	18	10 953	81	19
ACT	2 358	—(b)	100
Jervis Bay Territory	73	—(b)	57	..	100
Australia	7 692 024	100	59 736	39	61

— nil or rounded to zero (including null cells)

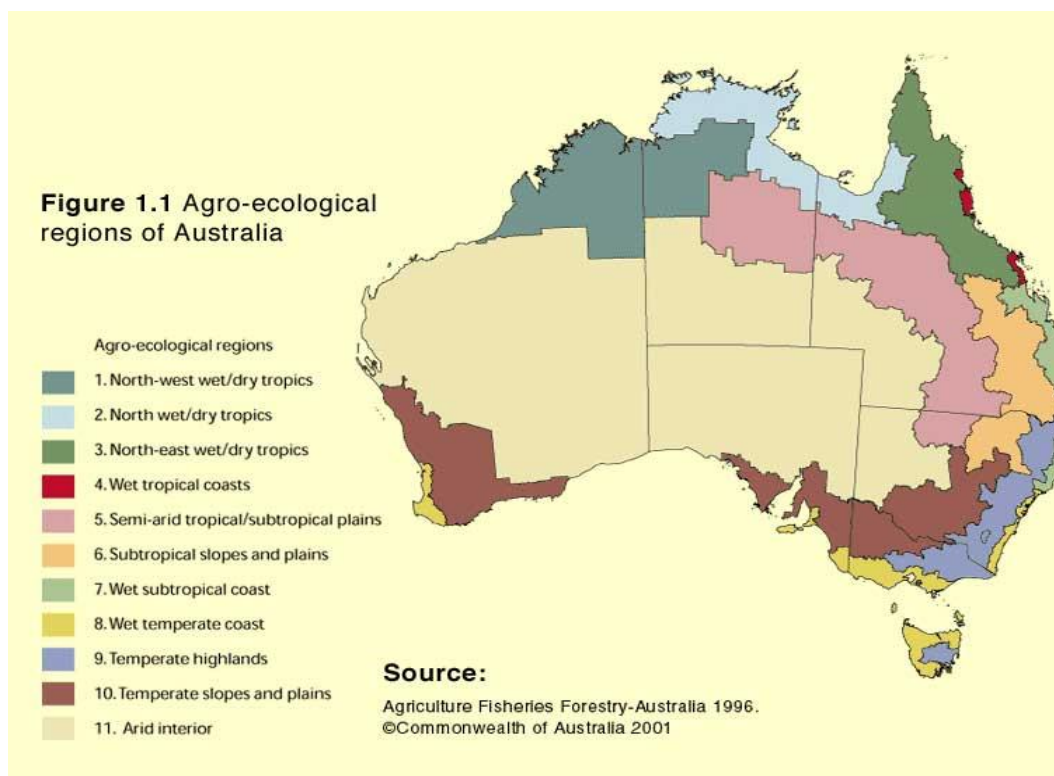
(a) Includes islands (b) Less than 0.1%.

Source: Australian Bureau of Meteorology; Geoscience Australia 2002.

II.2.B Climate and Agro-ecological zones

The island continent of Australia features a wide range of climatic zones, from the tropical regions of the north, through the arid expanses of the interior, to the temperate regions of the south. Australia is the world's second-driest continent (after Antarctica), with average (mean) annual rainfall below 600 millimetres (mm) over 80% of the continent, and below 300 mm over 50%. Australia experiences many of nature's more extreme weather phenomena, including droughts, floods, tropical cyclones, severe storms, bushfires and the occasional tornado. While droughts can occur in all parts of Australia, they are most economically damaging in south-eastern Australia (southern Queensland, New South Wales, Victoria, Tasmania and the settled parts of South Australia), an area encompassing about 75% of Australia's population and much of its agriculture⁵.

⁵ E. 01.4

MAP 2: Agro-ecological zones⁶**II.2.C Government and administration⁷**

Under the Australian Constitution the legislative power of the Commonwealth of Australia is vested in the Parliament of the Commonwealth. The Queen, Australia's formal head of state, is represented by the Governor-General of Australia and the Governors of the six states, each of whom exercise the constitutional powers of a head of state in their respective spheres.

The Commonwealth of Australia Constitution Act sets out the roles and powers of the Commonwealth government with residual matters vested in the states.

Australia has three levels of law-making—sometimes referred to as three levels of government—that work together to provide Australians with the services they need⁸.

The three levels are:

- federal Parliament—legislates, or makes laws, for the whole of Australia
- six state and two mainland territory parliaments—make laws for their state or territory
- over 560 local councils—make local laws, called by-laws, for their region or district.

Each level of government has its own responsibilities, although in some cases these responsibilities overlap.

⁶ E.01.2.4

⁷ E. 01.1

⁸ <http://www.peo.gov.au/learning/closer-look/governing-australia.html>

The Roles and Responsibilities of Australian, State and Local Governments⁹

The Australian Government

The Federal or Commonwealth Government is responsible for the conduct of national affairs. Its areas of responsibility are stated in the Australian Constitution and include defence and foreign affairs; trade, quarantine, commerce and currency; immigration; postal services, telecommunications and broadcasting; air travel; most social services and pensions. The Federal Government is also involved, mainly through funding, in many things largely carried out by the States, such as health, education, environmental issues, industrial relations, etc.

State or Territory Government

Under the Australian Constitution, the States are responsible for everything not listed as a Federal responsibility. However, sometimes both levels are involved. Major State responsibilities include schools, hospitals, conservation and environment, roads, railways and public transport, public works, agriculture and fishing (**including animal health**), industrial relations, community services, sport and recreation, consumer affairs, police, prisons and emergency services. Each state has its own constitution setting out its system of government.

Local Government

Local Government areas vary greatly in size and character. The Sydney area is divided into about 35 cities, municipalities or shires, each with its own local council. The bigger country centres such as Bathurst or Albury have city or municipal councils. Large but less populated country areas, with a number of small towns and large rural areas, are usually shires with a Shire Council based in one of the larger towns. The power of local governments is controlled by Acts of State Parliament such as the Local Government Acts. Local Councils are concerned with matters close to our homes, such as building regulations and development, public health, local roads and footpaths, parks and playing fields, libraries, local environmental issues, waste disposal, and many community services.

Demographic data

TABLE 3: 2014 December Key Population Figures¹⁰

PRELIMINARY DATA	Population at end	Change over	Change over
	Dec qtr 2014	previous year	previous year
	'000	'000	%
New South Wales	7 565.5	103.0	1.4
Victoria	5 886.4	101.5	1.8
Queensland	4 750.5	64.2	1.4
South Australia	1 691.5	14.8	0.9
Western Australia	2 581.3	40.1	1.6
Tasmania	515.2	1.4	0.3
Northern Territory	244.3	0.9	0.4
Australian Capital Territory	387.6	4.3	1.1
Australia(a)	23 625.6	330.2	1.4

(a) Includes Other Territories comprising Jervis Bay Territory, Christmas Island and the Cocos (Keeling) Islands.

⁹ www.parliament.nsw.gov.au/prod/web/common.nsf/key/TheRolesandResponsibilitiesofFederalStateandLocalGovernments

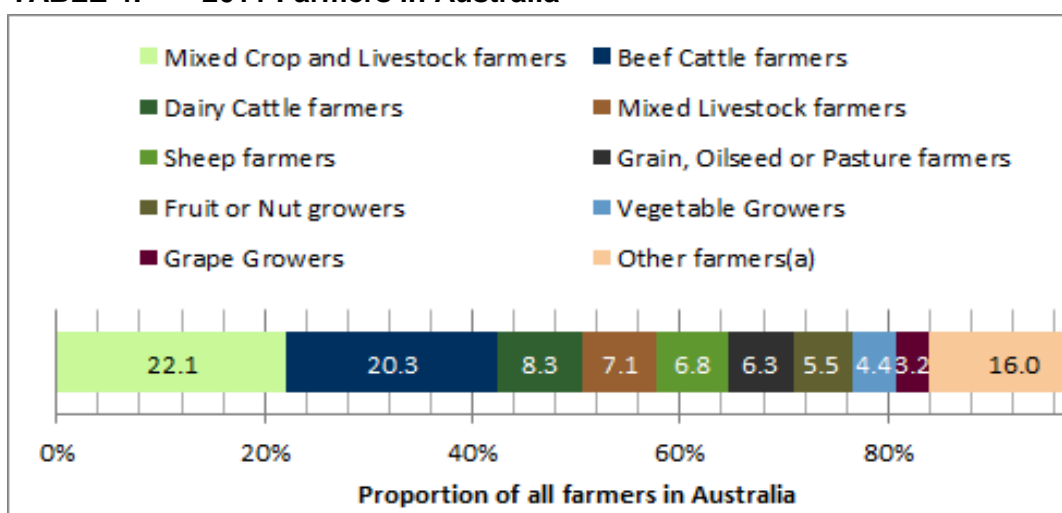
¹⁰ <http://www.abs.gov.au/ausstats/abs@.nsf/mf/3101.0/>

II.2.D Agriculture and livestock^{11, 12, 13}

In 2012-13 there were 157 000 farmers in Australia (down to 135 000 in 2015¹⁴). Around half of these were mixed crop and livestock farmers (22%); beef cattle farmers (20%) or dairy farmers (8%). There were also 223 goat farmers and 56 deer farmers.

These farmers own or manage 115 000 farm businesses (99% of which are Australian owned). The complete agricultural supply chain, including the affiliated food and fibre industries, provides over 1.6 million jobs to the Australian economy¹⁵.

TABLE 4: 2011 Farmers in Australia



Australian agricultural activities are broad-ranging, varying from extensive pastoral and cropping to intensive livestock and horticultural production. Agriculture in Australia utilises a large proportion of natural resources, including 52% of Australia's land area and 52% of national water use (in 2009–10).

Most of Australia's agricultural businesses are engaged in beef cattle farming, dairy cattle farming, sheep farming, grain growing, or a mixture of two or more of these activities.

In recent times, the agricultural commodities with the highest value of production by Australian farmers have been cattle and calf slaughterings, followed by wheat, milk, vegetables, fruit and nuts, sheep and lamb slaughterings, and wool.

Much of this produce is exported, with Australian wool, beef, wheat, and dairy products contributing significantly to global markets.

The **value of livestock production** is forecast to increase by around 11 per cent in 2015–16 to \$29.1 billion, on the back of an expected increase in farm gate prices for beef cattle, lamb, sheep and wool¹⁶.

¹¹ E. 01.4

¹² <http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4102.0Main+Features10Dec+2012#FARMERS%20IN>

¹³ E. 07.2 (2014)

¹⁴ <http://theconversation.com/australias-five-strong-pillar-economy-agriculture-40388>

¹⁵ National Farmers Federation 2013-14 Annual Report

¹⁶ <http://www.tfga.com.au/in-the-news/australias-farm-production-forecast-hit-571-billion/>

TABLE 5: Land Use Data year ended 30 June 2014¹⁷

	Aust. '000 ha	NSW '000 ha	Vic. '000 ha	Qld '000 ha	SA '000 ha	WA '000 ha	Tas. '000 ha	NT '000 ha	ACT '000 ha
Area of farms	406 269	58 303	12 290	139 933	52 823	89 313	1 701	51 871	34
Area of crops (a)	25 652	6 374	4 445	2 302	3 792	8 579	145	15	1
Area of vegetables	126	17	37	33	np	10	13	np	np

(a) Includes broad acre crops, hay and silage, nurseries, cut flowers and cultivated turf, fruit and nuts, and vegetables.

LIVESTOCK DATA (Unless stated otherwise, data were obtained from “Animal Health in Australia” – document E. 07.2)

TABLE 6: Summary of the livestock population per State / Territory region in 2013/14¹⁸

Name of State / Territory	Livestock population						
	Cattle ¹⁹	Sheep ²⁰	Goat	Pig	Poultry	Equidae	Other ²¹
NSW	5,662,941	26,713,083		433,018	7,577,472		292,171
Victoria	4,217,692	15,365,155		544,506	5,380,078		132,549
Queensland	12,931,794	2,339,554		632,093	5,177,834		160,852
South Australia	1,245,284	10,970,783		448,182	1,033,156		45,709
Western Australia	2,109,223	14,405,969		27,728 ²²	2,231,711		82,326
Tasmania	765,656	2,776,812		1,523 ²³	257,189		6,708
Northern Territory	2,164,332	np ²⁴		np	2		54,960
ACT	6,033	40,879		np	100,000		425
TOTAL	29,103,000	72,612,000		2,308,000	21,892,224 ²⁵		775,699

¹⁷ <http://www.abs.gov.au/ausstats/abs@.nsf/mf/7121.0> - added 15 SEP 2015

¹⁸ E.01.2

¹⁹ Dairy and meat cattle (ABS)

²⁰ Sheep and lambs (ABS)

²¹ This category includes horses, goats and domesticated buffaloes (ABS)

²² Breeding sows only (ABS)

²³ Breeding sows only (ABS)

²⁴ No publication figures available (ABS)

²⁵ Sum of layers and pullets plus all other poultry (ABS)

Key points regarding 30 June 2014 livestock census data are:

- Decreases in the number of dairy cattle reported on holding in Victoria, New South Wales and Tasmania drove the national dairy herd numbers down to 2.8 million. Variable seasonal conditions across Victoria and Tasmania as well as continuing dry conditions in New South Wales contributed to poorer pastures, driving the reduction in herd numbers.
- Meat cattle numbers were down slightly, driven by decreases in New South Wales (down 5%) and South Australia (down 7%). Queensland continued to account for the majority of the nation's meat cattle herd (49%) at 12.7 million head.
- Decreases in most states and territories drove the national number of sheep and lambs down to 72.6 million. The largest falls in flock size were reported in New South Wales (down 4%) and Western Australia (down 7%) reflecting in part limited feed availability coupled with good market prices and higher turnoff rates.
- Increases in pig numbers in Queensland and South Australia (which account for almost half of the Australian herd) drove national numbers up to 2.3 million due to growing domestic demand and decreased feed prices.

Source: *Agricultural Commodities, Australia*

Australia produces around 4% of the world's beef supply and is the world's seventh largest beef producer and third largest beef exporter. The industry is generally divided into two broad production regions. The southern region covers New South Wales, South Australia, Victoria, Tasmania and the remainder of southern Western Australia while the northern region includes Queensland, the Northern Territory and the northern part of Western Australia. The meat processing industry in Australia is comparatively concentrated and the top five red meat processors account for over half of production. There are over 400 feedlots in Australia located in areas close to cattle and grain supplies and the feedlot sector consumes around 3.7 million tonnes of grain annually²⁶.

Beef cattle

Cattle are raised over much of Australia. The main outputs are beef, animals for lot feeding and live cattle for export. Across northern Australia, cattle are produced on large holdings, where they graze native pastures at low stocking rates. *Bos indicus* breeds dominate because they are better adapted to the tropical conditions in the north. In southern Australia, cattle are produced on smaller holdings than in the north. Breeds derived from *Bos taurus* dominate.

Improved seasonal conditions in south-eastern and northern Australia between 2010 and 2012 encouraged restocking and reduced cattle turn-off. The improved conditions contributed to an increase in the **national herd** of approximately 2 million animals in 2010–11, to **25.7 million**. However, dry seasonal conditions in 2013–14, particularly in northern Australia, led to a decline to an estimated 24.7 million animals.

The volume of Australian beef exports increased by 17% in 2013–14 to approximately 1.2 million tonnes. The value of these exports increased by 29% to approximately \$6.3 billion. The number of live cattle exported for slaughter increased by 94% in 2013–14 to 996 462 animals.

²⁶ gain.fas.usda.gov/.../Livestock – 2014 Livestock and products Annual

Dairy cattle

The dairy industry (milk production) was the third-largest rural industry in Australia by value of production in 2012–13. Victoria has 65% of the national dairy herd, followed by New South Wales (12%) and Tasmania (9%). The Australian dairy cow herd declined by approximately one-quarter between 2000 and 2010. In 2010–11, it was 1.6 million animals. Since then, improved seasonal conditions, particularly in Victoria, have resulted in an increase in dairy cow numbers, which reached an estimated 1.69 million in 2013–14.

Australian milk production was largely unchanged in 2013–14 compared with 2012–13, at approximately 9.2 billion litres. A higher farm-gate price for milk is estimated to have resulted in the gross value of milk production rising by 25% in 2013–14, to \$4.6 billion.

Sheep

Sheep produce meat and wool over a wide range of environments in Australia, from the arid and semi-arid inland to the higher-rainfall areas of south-eastern Australia. Most Australian sheep are produced as part of mixed-farming enterprises, frequently along with cropping and beef production.

In 2013–14, sheep numbers were estimated to have declined by 4% from the previous year to 73 million.

This decline follows three consecutive years of strong growth in sheep numbers as favourable seasonal conditions, combined with positive returns for wool production and relatively strong lamb prices, resulted in strong restocking activity.

Over the past decade, the emphasis on wool production has decreased. A long-term decline in the demand for raw wool, coupled with growing demand for Australian lamb exports by the United States, Europe, the Middle East and Asia, has led to a greater emphasis on prime lamb production. Flock numbers steadily declined as significant numbers of wethers (non-breeding adult male sheep), previously used in wool production, were turned off. Farming of specialty meat breeds, such as Dorper and Damara (which do not produce any harvestable wool), is a small but growing sector.

Pigs

In recent years, the number of farms with pigs has declined steadily. The Australian Bureau of Statistics indicates that, at 30 June 2013, Australia had 1452 pig farms, holding 224 500 sows. This compares with 2007–08, when Australia had 1625 pig farms, holding 263 000 sows. In 2012–13, Victoria had the largest number of pigs, followed by Queensland and New South Wales.

Goats²⁷

Australia is the world's largest exporter of goat meat. In 2011–12, 1.78 million goats were slaughtered, supporting meat exports of 26 729 tonnes, valued at \$113.6 million. The two largest export markets for Australian goat meat in the three years to 2011–12 were the United States and Taiwan, which accounted for 53% and 28% of these exports, respectively. Additionally, 71 900 live goats were exported in 2011–12, with an estimated value of \$9.7 million. The largest markets for live goat exports in the three years to 2011–12 were Malaysia and Singapore, which accounted for 87% and 10% of these exports, respectively.

²⁷ E. 07.2 (2014)

Poultry^{28 29}

The term 'poultry meat' includes chicken meat as well as meat from other birds, such as turkey and ducks and spent layer hens. Australia's chicken meat industry plays an integral role in Australian agriculture and in the broader Australian economy, with the industry conservatively estimating that consumers currently spend \$5.6 billion per annum on chicken meat in supermarkets, fast food outlets, speciality shops and restaurants.

Poultry farming in Australia is predominantly an intensive industry, producing birds for meat and egg production. Meat chickens comprise approximately 85% of the flock and layer hens approximately 15%. The chicken meat industry is dominated by two large companies and several medium-sized operators. Most operations are located within 50 kilometres of capital cities.

In 2012–13, approximately 5662 businesses produced more than 334 million 'dozen egg packages' for human consumption. Approximately 50% of eggs are produced under intensive production systems, with the balance from free-range, barn-laid and organic systems. The value of egg production is estimated to have increased by approximately 3% in 2013–14 to \$670 million.

The chicken meat industry in Australia is vertically integrated, with breeder farm, hatcheries, meat chicken growing farms, processing plants, feed mills, laboratories and research facilities.

TABLE 7: Australian egg industry overview – June 2014³⁰

Egg production	397.4m dozen eggs - 2013/14
Flock size	22.945m (pullets & layers) - as at June, 2014 16.556m (layers) - as at June, 2014 (Source: AECL)
State flock percentages: - as at June 2013	NSW/ACT: 33% WA: 10% Queensland: 26% SA/NT: 5% Victoria: 25% Tasmania: 1% (Source: ABS, cat. no. 7121)
Number of egg farms	277 - as at June, 2013 (Source: ABS)

Ratites³¹

Two species of ratite are farmed commercially in Australia, the emu (*Dromaius novaehollandiae*) and the ostrich (*Struthio camelus*). The emu is farmed for three different products: meat, leather and emu oil. The latter is the most valuable.

In ostriches clostridial vaccination of chicks is beginning to occur on several ostrich farms in Australia. The vaccine used is the cattle six-in-one clostridial vaccine. Producers themselves tend to administer the vaccine. To maintain DAWR accreditation for export to the European Union, accredited farms must undertake once yearly serology of the birds on their property. This is performed by a DAWR approved veterinarian. Vaccination is currently performed on only a few emu farms in Australia against *Erysipelothrix rhusiopathiae*. Farmers themselves performed the vaccination procedure without the involvement of a veterinarian.

The Australian Ratite On-Farm Surveillance Plan (ARIOFSP) was developed in consultation with industry and provides a mechanism that facilitates the export of

²⁸ E.10.9

²⁹ E. 07.2

³⁰ E.10.11

³¹ E.10.10

Australian ratite meat to the EU in accordance with the requirements detailed in Commission Decision 2003/810/EC and associated documents. Under the ARIOFSP there has been active NDV surveillance on an ongoing basis.

There has been a major decline in ratite numbers and producers since 2005.

Water buffalo^{32, 33}

Between 1825 and 1843, about 80 buffalo were brought to Melville Island and Cobourg Peninsula, in the northern tip of the Northern Territory, for meat. When these settlements were abandoned in the mid-1900s, the buffalo soon colonised the permanent and semi-permanent swamps, and freshwater springs of the top end of the Northern Territory.

Australia has two types of buffalo: the river type from western Asia, with curled horns, and the swamp type from eastern Asia, with swept-back horns.

Prior to extensive culling in the 1980s, as part of the Brucellosis and Tuberculosis Eradication Campaign, there were as many as 350 000 buffalo. Numbers dropped dramatically as a result of the Campaign, but have since recovered to an estimated 150 000 animals across northern Australia in 2008.

A number of small scale industries have developed for live export and meat production

The gross value of production of the buffalo industry in 2011–12 was approximately \$3.2 million, mainly from milk and meat production, and live exports from the Northern Territory. Live exports decreased to 1 003 animals in 2011–12, down from 2166 in 2010–11 and a peak of 6 564 in 2006–07. The main markets in the past five years have been Brunei Darussalam, Indonesia and Malaysia.

In 2011–12, 171 buffalo were slaughtered, compared with the peak of 1994 in 1999–2000. Exports of buffalo meat are close to zero.

Camels (feral)³⁴

Australia may now have the largest wild population of Arabian camels (*Camelus dromedarius*) in the world. They live in most of Australia's desert country including the Great Sandy, Gibson, Great Victoria and Simpson deserts, as well as much of the semi-desert lands. Camels were first introduced into Australia in the 1840's to assist in the exploration of inland Australia. Between 1840 and 1907, between 10 000 and 20 000 camels were imported from India with an estimated 50-65% landed in South Australia.

Feral camels³⁵ are now broadly distributed across about 50% of the Australia rangelands. The wild dog fence currently provides an effective barrier limiting the spread of feral camels into suitable areas of New South Wales and Queensland.

Australian Feral Camel Management Project³⁶ program culled about 160,000 camels from Central Australia since it began in 2009, using ground-based and aerial culling techniques. Its main aim was to reduce camel densities to about one camel per 10 square kilometres across 18 key biodiversity sites.

Camels are processed in fully accredited export registered abattoirs under Australian Federal Government supervision. All animals undergo an ante and post mortem veterinary inspection to ensure all food safety requirements are met.

³² E.14.10

³³ E. 97.2

³⁴ <http://www.pestsmart.org.au/pest-animal-species/camel/>

³⁵ http://www.feralscan.org.au/camelscan/pagecontent.aspx?page=camel_historyandbiology

³⁶ <http://www.abc.net.au/news/2013-11-21/feral-camel-culling-report/5105884>

Camels in limited numbers are exported to the Middle East for breeding and racing purposes.

Game products

Australia produces high-quality game products from animals grazed on native grasslands. Game products include venison, kangaroo and buffalo. Data later than 2011–12 are not available.

Venison – In 2010–11, Australia had 1436 **deer farms**, carrying **45 073 animals**. Deer farms are located throughout Australia, but production is concentrated in Queensland, Victoria, New South Wales and Tasmania. The estimated gross value of production of the industry in 2011–12 was \$1.66 million, mainly from production of meat and antler velvet. The number of deer processed in 2011–12 was 5784, down from almost 47 000 in 2002–03. The combination of extended drought and lower prices in recent years for both venison and deer velvet has resulted in deer farmers leaving the industry.

Kangaroo – The gross value of production of the kangaroo industry in 2011–12 was \$28.6 million, down from a peak of \$54 million in 2005–06. Production and prices were considerably lower than in the mid-2000s because the Russian Federation withdrew from the kangaroo meat market in 2009. In 2011–12, approximately 1.77 million kangaroos were harvested for meat, yielding approximately 17 700 tonnes of meat for human consumption and pet food.

The value of kangaroo meat exports for human consumption in 2011–12 was \$20.4 million, down from a peak of around \$47 million in 2006–07. In the past, more than 70% of kangaroo meat exports were shipped to the Russian Federation, but withdrawal of the Russian Federation from the market reduced this share to zero in 2011–12. The major export destinations for kangaroo meat in 2011–12 were South Africa (28% of total exports), Germany (19%), the Netherlands (17%), Papua New Guinea (14%) and Belgium (11%).

II.2.E Economic and financial data

Australia³⁷ has a highly developed meat industry. In 2013–14, the gross value of slaughtered Australian livestock was estimated to be \$14.0 billion. In 2013–14, Australian exports of beef, veal, sheepmeat, poultry and pork (not including live animals) were worth \$8.6 billion. Australia is the world's second largest exporter of beef, veal and sheep meat.

Australia also produces and exports smaller quantities of meat from goats, kangaroos, emus, ostriches, deer, wild boars, possums, crocodiles and camels. It exports substantial quantities of animal products, such as wool, hides, skins, rendered meals and animal food.

The total value of Australia's agricultural production increased six per cent in 2013-14 to \$51 billion, according to figures released on 29th May 2015 by the Australian Bureau of Statistics (ABS)³⁸.

- National growth in the value of agricultural production was reported as being largely driven by an increase in the gross value of livestock disposals and products, which was up 13 per cent to \$23 billion.

³⁷ E. 07.2 (2014)

³⁸ <http://www.abs.gov.au/ausstats/abs@.nsf/Latestproducts/7121.0Media>

- Dry conditions in eastern Australia and the resulting limited feed availability saw many businesses destock, with national meat and dairy cattle, sheep and lamb numbers falling.
- A widespread turn-off of livestock resulted in an increase in the gross value of livestock disposals, up 12 per cent to \$14.7 billion.
- Cattle and calf slaughter accounted for the majority of this increase, contributing \$8.5 billion to the gross value.
- The adverse conditions in New South Wales, Victoria and Queensland also resulted in poor growing conditions and reduced production for most crops.

Meat, wool and eggs

Australia has a highly developed meat industry. In 2013–14, the gross value of slaughtered Australian livestock was estimated to be \$14.0 billion.

Comprehensive and detailed Animal and animal product trade data are available in the 2014 publication *Agricultural Commodity Statistics 2014: Research by the Australian Bureau of Agricultural and Resource Economics and Sciences (document E. 03.4)* www.agriculture.gov.au/abares/publications

Import and Export³⁹

TABLE 8: IMPORTS of animals and animal products in 2014 (Jan-Dec)⁴⁰

SPECIES	Quantity
Bees	6
Pigeons	160
Cats	2423
Dogs	5923
Eggs ⁴¹	12,740
Horses	2155
Lab animals	0

TABLE 9: EXPORTS⁴² of animals and animal products in 2014/15

Below are the total numbers of animals (by species) slaughtered at registered export establishments in 2014/15. (*Dept of Agriculture and Water Resources data from 1/7/14 – 30/6/15*)

Species

Cattle

Cow/Bull	2891540
Steer/Heifer	5693167
Calves	350964

TOTAL – 8,935,671

Sheep

Lamb	16512492
Mutton	8736612

TOTAL – 25,249,104

Goat

Skin off	1330922
Skin on	880327

TOTAL - 2211249

Pig

Skin off	18214
Skin on	4112181

TOTAL – 4,130,395

Poultry/Ratite

Emu	1687
Ostriches	1482

TOTAL – 3,169

Equidae

TOTAL - 9,516

Other

Kangaroo	983277
Deer	3489
Game Pig	43107
Camels	6201

Live animal exports in 2014-2015 were bees, birds, chickens, eggs, cats, dogs, horses and mice.

³⁹ E.01.2

⁴⁰ The top two countries of origin for horses, dogs and cats are New Zealand and the UK.

⁴¹ Bird eggs (duck, hen, turkey)

⁴² This information provided by DAWR, October 2015.

Financial data

Agriculture portfolio structure and outcomes

Details for the Commonwealth Agriculture Portfolio 2015-16 Budget are provided in doc E. 03.1. Total Estimated Expenses for 2015-2016 are AUS \$3 659 000

From 1 July 2015 the portfolio consists of, *inter alia*:

- The Australian Government Department of Agriculture (now Department of Agriculture and Water Resources).
- Two statutory authorities which undertake regulatory roles:
 - Australian Fisheries Management Authority (AFMA); and
 - Australian Pesticides and Veterinary Medicines Authority (APVMA).

Reference to **animal health** is made in Outcome 2 of the 2015-16 Portfolio Budget Statement, being:

Outcome 2:

Safeguard Australia's animal and plant health status to maintain overseas markets and protect the economy and environment from the impact of exotic pests and diseases, through risk assessment, inspection and certification and the implementation of emergency response arrangements for Australian agricultural, food and fibre industries.

Outcome 2 strategy

Contributions to achieving this outcome during 2015–16 will include:

- *implementing the Agricultural Competitiveness White Paper and the White Paper on Developing Northern Australia;*
- *providing efficient and effective biosecurity and export certification services within a risk based approach;*
- *progressing biosecurity reforms to more effectively and efficiently manage biosecurity risk in the context of continued growth in trade volumes;*
- *providing leadership in national biosecurity forums and under emergency response arrangements for incursions of exotic pests and disease;*
- *supporting the eradication and management of nationally significant agricultural and environmental plant and animal pests and diseases;*
- *implementing the Biosecurity Bill 2014;*
- *providing technical advice to allow exporters to access new overseas markets;*
- *transitioning post entry quarantine operations to a single facility; and*
- *reforming fees and charges under cost recovery arrangements under a sustainable funding model for biosecurity and export certification services.*

The Gross Domestic Product (GDP) in Australia was worth 1453.77 billion US dollars in 2014. The GDP value of Australia represents 2.34 percent of the world economy. GDP in Australia averaged 369.08 billion USD from 1960 until 2014, reaching an all time high of 1560.37 USD billion in 2013 and a record low of 18.60 USD Billion in 1960. GDP in Australia is reported by the World Bank Group⁴³.

⁴³ <http://www.tradingeconomics.com/australia/gdp>

FIGURE 1: Australian GDP 2006 to 2014 (and 2015 YTD)

Portfolio Budget Statements 2015–16 / Agriculture Portfolio of the Australia Commonwealth Department of Agriculture is available in document E. 03.1.

Agriculture contributes about 2.3% to the GDP

II.3 Context of the evaluation

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

A list of documents received by the OIE PVS Team before and during the PVS Evaluation mission is provided in Appendix 5. All documents and presentations listed in Appendix 5 are referenced to relevant critical competencies to demonstrate the levels of advancement and related findings.

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 Code.

TABLE 10: 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	✓		
○ at 2 nd administrative level	✓		
○ at 3rd administrative level	✓		
○ per animal species	✓		
○ per production systems	✓		
→ Organisations charts			
○ Central level of the VS	✓		
○ 2 nd level of the VS	✓		
○ 3 rd level of the VS	✓		

Main document categories	Data available in the public domain	Data accessible only on site or on request	Data not available
→ Job descriptions in the VS			
○ Central levels of the VS	✓		
○ 2 nd level of the VS	✓		
○ 3 rd level of the VS	✓		
→ Legislations, regulations, decrees ...			
○ Animal health and public health	✓		
○ Veterinary practice	✓		
○ Veterinary statutory body	✓		
○ Veterinary medicines and biologicals	✓		
○ Official delegation	✓		
→ Veterinary census			
○ Global (public, private, veterinary, para-professional)	✓		
○ Per level	✓		
○ Per function	✓		
→ Census of logistics and infrastructures	✓		
→ Activity reports	✓		
→ Financial reports	✓		
→ Animal health status reports	✓		
→ Evaluation reports	✓		
→ Procedures, registers, records, letters	✓		
...			

II.3.B General Organisation of the Veterinary Services

B.1 Australia's Animal Health System⁴⁴

Australia's animal health system includes all organisations, government agencies, commercial companies, universities and individuals who are involved in the health and safety of the livestock production chain. Wildlife Health Australia complements livestock health activities and provides Australia's framework for national management of the health and diseases of wildlife (both native and feral animals).

The Australian Government advises on and coordinates animal health policy at a national level. It is responsible for international animal health matters, including quarantine, export certification and trade, as well as disease reporting to the World Organisation for Animal Health (OIE). Under the Australian constitution, the individual state and territory governments are responsible for animal health matters within their boundaries. Such matters include disease surveillance and control, chemical residues in animal products, livestock identification and traceability, and animal welfare.

Australian governments have a close association with livestock industries. This allows consultation between government and industry to determine national animal health priorities. The livestock industries participate in policy development, support targeted animal health activities and contribute to emergency responses.

⁴⁴ <http://www.agriculture.gov.au/animal/health/system>

Government-run veterinary services in Australia involve officers from the Australian Government, state and territory governments, and local government. A system of consultative committees ensures that these three levels of government work together to serve the overall interest of Australia. In addition, the interests of government and industry are served through **Animal Health Australia**, a public company whose members include the Australian Government, state and territory government, the peak national councils of Australia's livestock industries and various key research, veterinary and educational organisations. Additionally, Australia's animal health laboratory network, which comprises the state and territory laboratories, the Australian Animal Health Laboratory at Geelong, private laboratories and the various university laboratories, plays a critical role in providing diagnostic, surveillance and research services to support nationwide veterinary activities and the health and productivity of Australia's livestock industries.

Table 11: Veterinary Personnel, Australia, 2014⁴⁵

Veterinarians									
Animal health activities		Public Health activities (abattoirs, food hygiene, etc.)		Laboratories		Academics or Training Institutions	Private practitioners in the pharmaceutical industry	Independent Private Veterinarians	Others
Public administration	Private accredited practitioners	Public administration	Private accredited practitioners	Public administration	Private laboratory veterinarians				
423	8952	191	23	68	96	503	170	...	646 (*)

Note :

(*) retired, r&d, welfare, zoos, community groups, industry groups

Veterinary Paraprofessionals		
Involved in animal health activities	Community animal health workers	Involved in food hygiene, including the abattoirs
181	...	985

B.1.1 Australia's Public (Government) Veterinary Health System^{46, 47}

State and territory government responsibilities

Under the Australian Constitution, state and territory governments have legislative responsibility for animal health services within their respective borders.

State and territory animal health services administer relevant acts and regulations involved with livestock identification and movement (within and between states and territories), disease surveillance, diagnosis, reporting notifiable animal diseases and reportable aquatic animal diseases and control, chemical residues and other programs.

⁴⁵ http://www.oie.int/wahis_2/wah/action7_en.php

⁴⁶ <http://www.agriculture.gov.au/animal/health/system>

⁴⁷ E. 07.2

Each state and territory is further subdivided into veterinary regions or divisions that are under the control of a government veterinary officer.

Each region or division is further subdivided into animal health districts which are administered by inspectors who may be veterinarians or qualified animal technicians.

Veterinary officers located in regions supervise inspectors and administer the application of relevant state and territory acts and regulations. They also maintain records of the animal health status on farms in their region that assist in the reliable certification of animals moving within Australia and overseas.

The states and territories also have government animal health laboratories that provide a disease diagnosis and investigation service and which may also undertake applied research.

Australian Government

- **The Australian Chief Veterinary Officer**

The Office of the Chief Veterinary Officer (OCVO) provides national leadership and direction on priority policy issues relating to animal health and welfare in Australia.

The Australian Chief Veterinary Officer (ACVO) is Australia's principal representative on animal health matters nationally and internationally, and is Australia's permanent representative to the World Organization for Animal Health (OIE). As the international reference point on animal health, the OCVO coordinates animal health intelligence gathering, Australia's commitments to OIE, and communication with other international agencies dealing with animal health and welfare. The ACVO is also the Australian Government member on the Animal Health Committee (AHC) and Chairs the Consultative Committee on Emergency Animal Diseases (CCEAD).

- **Quarantine and biosecurity**

DAWR's quarantine and biosecurity functions within the Animal Division work in conjunction with other areas of the department to deliver effective, risk-based services across the biosecurity continuum. This structure reflects a national approach to biosecurity, simplifies domestic and international communications, and improves responsiveness.

The following divisions and branches are responsible for animal health, biosecurity policy, export health certification, and the regulation of importation of animals and plants⁴⁸, their genetic material and their products:

- Office of the Chief Veterinary Officer
- Biosecurity Animal Division (Animal Health Policy, Animal & Biological Import Assessments, Animal Biosecurity)
- Exports division (Export Standards, Meat Exports, Live Animal Exports, Residues and Food)

Their veterinary functions include responsibility for:

- veterinary public health inspection of meat through a national inspection service;
- animal quarantine involving imports of live animals and animal products, and
- health certification of exports of live animals and animal reproductive material.

⁴⁸ Biosecurity Plant Division is responsible for the regulation of some plant based commodities used in animal production

Although the Australian Government has responsibility for formulating policy and ultimate responsibility for quarantine under the Australian Constitution, the states and territories may act as operational field agents of the Commonwealth to assist the delivery of quarantine and export certification services.

Under the provisions of the Accreditation Program for Australian Veterinarians (APAV), accredited veterinarians also play an important role in delivery of export certification services.

B.1.2 Australian Government committees relevant to the veterinary domain⁴⁹

- **National Biosecurity Committee**

The National Biosecurity Committee (NBC) provides strategic leadership across jurisdictions and sectors in the development and implementation of national approaches and policies for emerging and ongoing biosecurity issues, including in animal health. The NBC operates under the authority of the Intergovernmental Agreement on Biosecurity (IGAB). AHC reports to the NBC. A key focus during 2014 was development of policy frameworks and work on eight IGAB schedules, covering all essential elements of national onshore biosecurity.

- **Animal Welfare Task Group**

The Animal Welfare Task Group advises and supports governments on national animal welfare policy issues. The task group focuses on animal welfare issues that support improved long-term and sustainable economic, social and environmental outcomes, informed by community expectations – for example, development of nationally consistent animal welfare standards and guidelines for sheep and cattle.

- **Animal Health Committee (AHC)**

AHC provides the Australian Government with scientific, strategic and nationally coordinated policy advice on animal health matters through the NBC and AHC's higher reporting processes.

AHC leads the development and implementation of government policy, programs, operational strategies and standards in national animal health, domestic quarantine and veterinary public health.

AHC members comprise the Australian and state and territory chief veterinary officers, and other representatives from DAWR, the Australian Government Department of the Environment, and the Australian Animal Health Laboratory of the Commonwealth Scientific and Industrial Research Organisation (CSIRO-AAHL). AHC observers are from AHA, WHA and New Zealand.

AHC communicates and consults with its animal industry stakeholders through broad and regular dissemination of the newsletter Vetcommuniqué, industry membership of AHA, and direct industry participation in AHC meetings. Aquatic industries are consulted through the National Aquatic Animal Health Industry Reference Group and the Australian Fisheries Management Forum. Those with an interest in zoo or wild (including feral) animals are consulted through WHA.

There is one sub-committee of AHC: The **Sub-committee on Aquatic Animal Health**. (The operations of the Sub-committee on Animal Health Laboratory Standards will cease in 2015)

⁴⁹ E. 07.2

B.1.3 Food Safety⁵⁰

The Australian domestic food regulatory system covers three distinct areas: developing policy, setting food standards, and implementing and enforcing food standards. An intergovernmental agreement ensures an effective and cooperative national approach to food safety and regulation in Australia. A treaty between Australia and New Zealand provides for many common food standards in both countries.

Primary production and processing standards for Australia have been developed for seafood, meat and meat products (including game meat, ready-to-eat meat and poultry meat), dairy products, eggs and egg products, and seed sprouts. All states and territories are implementing these standards. FSANZ is currently developing a primary production and processing standard for raw milk products. New standards generally have a two-year phase-in period from the date of approval.

Country-of-origin labelling is currently required for all packaged food and unpackaged fresh or processed fruit, vegetables, seafood, pork, beef, sheep meat and chicken meat sold in Australia.

In 2011 the Australian Export Meat Inspection Service (AEMIS) was introduced in order to formalise arrangements and transition to full cost recovery by the then DAFF for government provided food safety services.⁵¹

B.1.4 Government–industry committees and organisations⁵²

- **Consultative Committee on Emergency Animal Diseases (CCEAD)**

The Consultative Committee on Emergency Animal Diseases (CCEAD) is convened when an EAD outbreak occurs. The CCEAD comprises AHC members and technical representatives from relevant industries

- **Animal Health Australia (AHA)**

AHA is the government-industry coordinating body for national animal health programs in Australia. With a national focus on animal health, welfare and biosecurity issues, the company facilitates sustainable partnerships between members. It provides leadership in securing outcomes that support Australia's position as a world leader in animal health and animal health services.

AHA's 32 members, associate members and service providers comprise the Australian Government, the state and territory governments, livestock industry organisations and service providers; a number of other organisations are associate members.

AHA has a strong track record in delivering significant outcomes for its members and is recognised as an important contributor to improving animal health in Australia. The company's roles are to:

- improve Australia's animal health policy and practice by building capacity for EAD preparedness
- ensure that Australia's livestock health systems support productivity, competitive advantages and preferred market access
- ensure that animal health programs help to protect human health, the environment and recreational activities
- manage nationally agreed animal health programs.

⁵⁰ E. 07.2

⁵¹ <http://www.meatinspectors.com.au/quality-assurance/industry-background>

⁵² E. 07.2

AHA uses a comprehensive consultative approach, based on consensus, to identify priorities and resolve issues. The company has established a number of formal and informal consultative mechanisms. For example, the Industry Forum provides a unique opportunity for AHA industry members to discuss industry-related concerns. An industry consensus can then be brought to the Members' Forum for broader consideration by all members of the company. By working across a complex network of stakeholders, AHA delivers results that benefit the national animal health system as a whole.

- **Commonwealth Scientific and Industrial Research Organisation**

CSIRO undertakes animal health research and operates the Australian Animal Health Laboratory (AAHL) at Geelong. This is a high security laboratory for emergency animal disease diagnosis and research. It provides training in emergency animal diseases for Australia's and overseas animal health field and laboratory staff.

AAHL is an OIE Collaborating Centre for New and Emerging Diseases and a designated OIE reference laboratory for bluetongue, avian influenza, Newcastle disease, Hendra and Nipah virus diseases, yellowhead disease, and epizootic haematopoietic necrosis.

- **Antimicrobial Resistance Prevention and Containment Steering Group⁵³**

Development and implementation of Australia's National Antimicrobial Resistance (AMR) Strategy is being overseen by the Australian Antimicrobial Resistance Prevention and Containment (AMRPC) Steering Group. The steering group is jointly chaired by the secretaries of the departments of health and agriculture, and includes the Australian Chief Medical Officer and the Australian Chief Veterinary Officer.

In August 2014, the AMRPC Steering Group approved the establishment of an Australian Strategic and Technical Advisory Group on AMR (ASTAG) to provide ongoing technical, scientific and clinical advice and expertise to inform the development of the national AMR Strategy, and to ensure that actions under the strategy are effectively and efficiently implemented.

One Health - To support a united human and animal medicine approach, the AMRPC Steering Group agreed that ASTAG members would include both veterinary and medical disciplines, and agriculture and food representatives, and would be co-chaired by the Australian Chief Medical Officer and Chief Veterinary Officer. The group also includes state and territory representatives to support consideration and implementation of actions at the state and territory level.

- **SAFEMEAT⁵⁴**

SAFEMEAT is a partnership between the red meat and livestock industries and the state and federal governments of Australia.

This partnership ensures that Australian red meat and livestock products achieve the highest standards of safety and hygiene from the farm to the consumer. SAFEMEAT initiates research and development, develops communication linkages, monitors the status of Australia's products, reviews standards and examines emerging issues that could have an impact on the industry in the future.

SAFEMEAT encourages rationalisation of regulations and standards within the industry, drives the direction of strategies that ensure meat safety standards and hygiene and monitors industry performance in respect of these.

⁵³ E.07.2

⁵⁴ <http://safemeat.com.au/about-safemeat/overview.htm>

- **OzFoodNet⁵⁵**

In 2002, the then Department of Health and Ageing, in collaboration with state and territory health agencies, established OzFoodNet to improve the national surveillance of foodborne disease. This collaborative network of epidemiologists, microbiologists and food safety specialists conducts applied research into foodborne disease and methods for improving surveillance. Reports from OzFoodNet are provided fortnightly to the Communicable Diseases Network of Australia (CDNA) and are published in Communicable Diseases Intelligence, a quarterly publication of the Department of Health. OzFoodNet identifies outbreaks, and provides early warning, of foodborne illnesses in Australia. It ensures a consistent national response to such outbreaks, and reduces the number of incidents and spread of foodborne illness by prompt preventive action.

B.2 Private Veterinary Services and public-private veterinary partnership

Private veterinary practitioners⁵⁶ play a vital role in rural communities, by providing livestock owners with animal health and production advice, and by investigating and treating disease. They also play an integral role in programs for detecting and responding to disease incidents in Australia's livestock industries.

Veterinary practitioners must be registered in the state or territory in which they primarily practise. However, in conjunction with the Australasian Veterinary Boards Council and the Animal Health Committee, the AVA helped develop a model for national recognition of veterinary registration across Australia. State legislation to enact the model is in the process of being introduced progressively across jurisdictions. In Victoria, New South Wales, Queensland, Tasmania and South Australia, veterinarians registered in another Australian jurisdiction can practise without registering again in those states. Other states and territories are in the process of preparing similar legislation⁵⁷. Competence in recognising and diagnosing livestock diseases is an important part of veterinary education in Australia, and a prerequisite for registration as a veterinarian. All veterinary practitioners should be able to recognise the possibility of an EAD and be familiar with the procedures to initiate an immediate response. To maintain this awareness, state and territory authorities conduct awareness programs on notifiable and exotic livestock diseases for private veterinarians, particularly those involved in livestock industries.

The national Accreditation Program for Australian Veterinarians is designed to integrate private veterinary practitioners into the national animal health system, thus supporting the international standing of Australia's animal health capability.

The program accredits nongovernment veterinarians who can use their skills and knowledge effectively to contribute to government and industry animal disease control programs, and export inspection and certification.

Other national programs that involve private veterinarians in the national animal health system are the Australian Veterinary Practitioner Surveillance Network and the National Significant Disease Investigation Program.

Australia has seven veterinary schools, at the University of Queensland, the University of Sydney, the University of Melbourne, Murdoch University, Charles Sturt University, James Cook University and the University of Adelaide.

All are currently producing graduates. All Australian veterinary courses include strong undergraduate programs in the health of horses, companion animals, farmed

⁵⁵ E.07.2

⁵⁶ E. 07.2

⁵⁷ <http://www.ava.com.au/node/1058>

livestock and wildlife, as well as in biosecurity and public health. The veterinary schools also provide research, continuing education and postgraduate training relevant to Australia's livestock industries.

The **Australian Veterinary Association (AVA)** works with state, territory and local governments through its divisions, giving expert advice and promoting AVA policy to decision makers, the community and media. They also help local branches to provide services to members⁵⁸

There are 21 special interest groups within the AVA. These groups provide opportunities for members with shared interests or expertise to develop their practice and skills in a specific area. Special interest groups provide relevant and focused continuing professional development, networking and social activities, as well as newsletters and journals to keep members informed.

Filling the gap in government veterinary services is one of the AVA's five strategic priorities. *The program in this area focuses on developing and promoting a model of public-private veterinary partnerships between governments and private veterinarians. The ultimate goal is to ensure effective surveillance, early detection and management of disease.*

The AVA was involved in the development of national standards for the employment of private veterinarians in an emergency animal disease outbreak. These national standards have been agreed by all states and territories.

Accreditation Program for Australian Veterinarians (APAV)⁵⁹

APAV is the national program designed to integrate private veterinary practitioners into the national animal health system to support the international standing of Australia's animal health service capability.

The program aims to have an internationally recognised process for accrediting non-government veterinarians for involvement in government and industry animal disease programs.

Animal Health Australia maintains a database of APAV accredited veterinarians' details to facilitate engagement of accredited veterinarians by governments or industries with responsibility for APAV operational programs. The APAV requires these agencies to conduct audits of the APAV veterinarians employed in their programs. A total of 653 veterinarians are registered as APAV (Accreditation Program for Australian Veterinarians) accredited. Of these 653 currently registered APAV veterinarians, 209 are also Market Assurance Program (MAP) accredited.

Australian Government Accredited Veterinarian (Livestock) (AAVet)⁶⁰

The AAV course is a prerequisite for accreditation as an Australian Government Accredited Veterinarian (Livestock). The AAV course is designed to inform veterinarians involved in the pre-export preparation and/or shipboard services for livestock of their legislative responsibilities as an AAV. It also provides relevant background information about the livestock export process.

⁵⁸ <http://www.ava.com.au/about-us-0>







⁵⁹ <http://www.animalhealthaustralia.com.au/training-centre/accreditation-program-for-australian-veterinarians-apav/>

⁶⁰ <http://www.animalhealthaustralia.com.au/training-centre/australian-government-accredited-veterinarian-livestock-aavet>

II.3.C Animal disease occurrence

The following table lists officially notifiable disease  Notifiable  No

TABLE 12: Diseases present in Australia 2015⁶¹

Disease	Domestic		Wild	
	Notifiable	Status	Notifiable	Status
American foulbrood of honey bees		Disease present		
Anthrax		Disease limited to one or more zones		Absent (since Unknown)
Avian chlamydiosis		Disease present		Disease present
Avian infect. laryngotracheitis		Disease present		Absent (since Unknown)
Avian infectious bronchitis		Disease present		Absent (since Unknown)
Avian mycoplasmosis (M.synoviae)		Disease present		Absent (since Unknown)
Bluetongue		Infection/infestation limited to one or more zones		Absent (since 06/2010)
Bov. genital campylobacteriosis		Disease present		Absent (since Unknown)
Bovine anaplasmosis		Disease limited to one or more zones		Absent (since Unknown)
Bovine babesiosis		Disease limited to one or more zones		Absent (since Unknown)
Bovine viral diarrhoea		Disease present		Absent (since Unknown)
Caprine arthritis/encephalitis		Disease present		Absent (since 1987)
Echinococcus granulosus (Infection with)		Disease present		Suspected (not confirmed)
Enzootic bovine leukosis		Disease limited to one or more zones		Absent (since Unknown)
Equid herpes virus-1 (EHV-1) (Infection with)		Disease present		Absent (since Unknown)
Equine viral arteritis		Infection/infestation		
European foulbrood of honey bees		Disease present		
Inf.bov.rhinotracheit. (IBR/IPV)		Disease present		Absent (since Unknown)

⁶¹ http://www.oie.int/wahis_2/public/wahid.php/Countryinformation/Animalsituation

Infection with <i>Perkinsus olseni</i>	✓	Disease limited to one or more zones	✓	Absent (since 08/2013)
Mycoplasmosis (<i>M. gallisepticum</i>)	✗	Disease present	✗	Absent (since Unknown)
Mycoplasmosis (<i>M. gallisepticum</i>)	✗	Disease present	✗	Absent (since Unknown)
Myxomatosis	✗	Disease present	✗	Disease present
Ovine epididymitis (<i>B. ovis</i>)	✗	Disease present	✗	Absent (since Unknown)
Paratuberculosis	✓	Disease limited to one or more zones	✓	Absent (since 2009)
Q fever	✗	Infection/infestation	✗	Infection/infestation
Rabbit haemorrhagic disease	✗	Disease present	✗	Disease present
Small hive beetle infestation	✓	Disease present		
Trichomonosis	✗	Disease present	✗	Absent (since Unknown)

TABLE 13: Diseases not reported in Australia 2015⁶²

Disease	Domestic				Wild		
	Notifiable	Last occurrence	Surveillance	Note	Notifiable	Last occurrence	Surveillance
Bovine tuberculosis	✓	2002	General Surveillance		✓	2002	General Surveillance
Brucellosis (<i>Brucella abortus</i>)	✓	1989	General Surveillance		✓	1989	General Surveillance
Brucellosis (<i>Brucella suis</i>)	✓	12/2010	General Surveillance		✓	12/2012	General Surveillance
Classical swine fever	✓	1962	General Surveillance		✓	1962	General Surveillance
Contagious agalactia	✓	Unknown	General Surveillance		✓	Unknown	General Surveillance
Contagious bovine pleuropneumonia	✓	1967	General Surveillance		✓	1967	General Surveillance

⁶² http://www.oie.int/wahis_2/public/wahid.php/Countryinformation/Animalsituation

Disease	Domestic				Wild		
	Notifiable	Last occurrence	Surveillance	Note	Notifiable	Last occurrence	Surveillance
Contagious equine metritis	✓	1980	General Surveillance		✓	1980	General Surveillance
Epizootic abortion (colonydiosis)	✓	Unknown	General Surveillance		✗	Unknown	
Epizoot. haematopoietic necrosis	✓	2008	General Surveillance		✓	04/2012	General Surveillance
Epizootic haemorrhagic disease	✓	12/2013	General Surveillance		✓	06/2010	General Surveillance
Epizootic ulcerative syndrome	✓	01/2012	General Surveillance		✓	11/2014	General Surveillance
Equine infectious anaemia	✓	12/2013	General Surveillance		✓	Unknown	General Surveillance
Equine Influenza	✓	11/2007	General Surveillance		✗	Unknown	
Equine piroplasmosis	✓	1976	General Surveillance		✓	1976	General Surveillance
Foot and mouth disease	✓	1871	General Surveillance		✓	1871	General Surveillance
Fowl typhoid	✗	1952	General Surveillance		✗	1952	General Surveillance
Glanders	✓	1891	General Surveillance		✓	1891	General Surveillance
Highly path. avian influenza	✓	21/02/2014	General Surveillance		✓	11/1997	General Surveillance
Infect. bursal disease (Gumboro)	✓	2004	General Surveillance		✓	2004	General Surveillance
Infection with abalone herpes-like virus	✓	12/2011	General Surveillance		✓	02/2011	General Surveillance
Infection with <i>Batrachochytrium dendrobatidis</i>	✓	Unknown	General Surveillance		✓	05/2013	General Surveillance
Infection with ranavirus	✓	2008	General Surveillance		✓	2008	General Surveillance
Infectious hypodermal and haematopoietic necrosis	✓	01/04/2008	General Surveillance		✓	12/2014	General Surveillance

Disease	Domestic				Wild		
	Notifiable	Last occurrence	Surveillance	Note	Notifiable	Last occurrence	Surveillance
Infection with <i>Batrachochytrium dendrobatidis</i>		Unknown	General Surveillance			05/2013	General Surveillance
Infection with <i>ranavirus</i>		2008	General Surveillance			2008	General Surveillance
Infectious hypodermal and haematopoietic necrosis		01/04/2008	General Surveillance			12/2014	General Surveillance
Japanese encephalitis		2004	General Surveillance			2004	General Surveillance
<i>Leishmaniasis</i>		12/2014	General Surveillance			12/2013	General Surveillance
Low pathogenic avian influenza (poultry)		27/06/2013	General Surveillance				
Newcastle disease		01/2012	General Surveillance			Unknown	
<i>Fulcrum</i> disease		1992	General Surveillance			1992	General Surveillance
Rabies		1867	General Surveillance			1867	General Surveillance
<i>Rinderpest</i>		1923	General Surveillance			1923	General Surveillance
<i>Scrapie</i>		1952	General and targeted surveillance			1952	General and targeted surveillance
<i>Trichinellosis</i>		Unknown	General Surveillance			Unknown	General Surveillance
<i>Vitroosis</i> of honey bees		1997	General Surveillance				
West Nile Fever		12/2011	General Surveillance			12/2011	General Surveillance
White tail disease		2008	General Surveillance			12/2011	General Surveillance

II.4 Organisation of the evaluation

II.4.A *Timetable of the mission*

Combined Appendix 3 and 4 of Part V provides the timetable of the mission, details of the facilities and locations visited by the OIE PVS Team and a list of resource / contact people met and interviewed. Appendix 5 of Part V provides the international air travel itinerary of team members.

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

Under the Australian Constitution, state and territory governments have legislative responsibility for animal health services within their respective borders.

The OIE PVS Team visited **all jurisdictions**, being the Australian (Federal) Government in Canberra, Australian Capital Territory, New South Wales, Northern Territory, Queensland, South Australia, Tasmania, Victoria and Western Australia

Given the size of Australia, being a continent in its own right, the suggested sampling framework (“ideal” sampling) recommended in OIE PVS Manual could not be applied. However, the evaluation included the widest possible spectrum of veterinary activities and addressed stakeholder and public-private partnership participation on all relevant levels.

The **pre-mission OIE PVS Training Seminar** to VS participants in Canberra, held in **July 2015**, addressed in detail the concept and methodology of an OIE PVS evaluation and the requirements for preparation and execution of the to-be-followed Australia OIE PVS Evaluation.

This greatly assisted in the in-depth preparation of the OIE PVS mission by the Office of the Australian CVO, ensuring that under the given time constraint regarding the mission, the sites visited by the Team represent a balanced and best possible sampling process.

Appendix 3 of Part V provides a detailed list of sites visited and meetings conducted.

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

The activities of the 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 weaknesses where applicable, and established a current level of advancement for each critical competency. Evidences supporting this level are listed in Appendix 5. General recommendations were provided where relevant.

The current level of advancement for each critical competency is shown in cells shadowed in grey (15%) 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 fourteen 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 <i>The appropriate staffing of the VS to allow for veterinary and technical functions to be undertaken efficiently and effectively.</i> 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): Appendix 1

Evidence (listed in Appendix 5): E.01.2, E.01.2.3.1, E.01.2.8, E.07.22, 2M.6, 2M.17, 2M.18.

Findings:

TABLE 14: Veterinarians and other animal health personnel in Australia, 2014

Registered veterinarians	Number	Veterinary paraprofessionals / Auxiliary personnel	Number
Government	614	Stock/biosecurity inspectors, meat inspectors, etc.	1 166
Laboratories, universities, etc.	837		
Private practitioners	8 975		
Other veterinarians	646		
Total	11 072	Total	1 166

At the Australian Government level in the Department of Agriculture and Water Resources there are two veterinary employee classifications:

- OPV – on plant veterinarians (veterinarians working in ante and post mortem inspection and supervision in abattoirs)
- VET – veterinarians working on technical animal health or veterinary public health policy or programs and not placed in abattoirs.

At the time of the evaluation, DAWR employed approximately 214 veterinarians as fulltime equivalents (FTEs), 82 as on plant veterinarians all employed within Service Delivery Division in the Veterinary, Export Meat and Scientific Services Branch and 132 as other veterinarians, with most employed in Biosecurity Animal Division (52), Exports Division (39) and Service Delivery Division (32).

Generally those veterinarians working in the Service Delivery Division are based outside Canberra in the regional offices, or based at export abattoirs (OPVs), while other veterinarians such as from Biosecurity Animal Division and Exports Division are mostly (but not entirely) employed in Canberra.

The other employee classifications are as follows:

- MEAT – trained and accredited meat inspectors working for the department (156, all in the Service Delivery Division and outside Canberra)
- SCI – scientists who are employed to provide specialist technical services (but not necessarily veterinary services) to the department.
These may be in Canberra or outside. Those in the Service Delivery Division are generally employed outside Canberra, with most other employees from the other Divisions based in Canberra.
- POL-TECH – Policy/technical officers, all other non-specialist officers employed by the department.

In general terms, over the last two or three years there has been a significant number of voluntary redundancies taken up within the department, including veterinarians, accompanied by a general recruitment freeze given budgetary constraints. More recently this recruitment freeze has been lifted and there has been recruitment activity including for veterinarians across Biosecurity Animal and Export Divisions in Canberra to replace or partially replace those that left via voluntary redundancies. The great majority of veterinary (or related) staff are permanent or permanent part time with only a very small number of contractors or casual staff.

In all the jurisdictions over the last few years there has been a steady decrease in staffing levels, in some approaching 50%. In one jurisdiction over the next 5 to 10 years 38% of workforce is expected to retire.

It was noted that since the end of the Brucellosis and Tuberculosis Eradication Campaign i.e. the successful elimination of these diseases, the staff numbers have been cut with now barely enough staff to handle the current work load, engage with industry and others and this only because of prioritisation of work and decrease in activities. While these reductions have produced efficiencies through enhanced collaboration, at the same time resources are stretched so thinly that there are concerns about the ability to handle a sudden increase in demand due to a disease emergency.

In some jurisdictions there has been an increase in the number of positions regulating animal welfare e.g. in one over the past 10 years, the number of animal welfare inspectors has increased from one manager and 2 operational staff to one manager and 6 operational staff.

Concerns that jurisdictions face financial constraints and staffing reductions have been raised by various sources including some CVOs, AHA staff and members, industry leaders, AVA and private veterinarians. In Victoria the DEDJTR's December 2014 Biosecurity Budget Strategy highlighted the implications of its staff resourcing constraints. It reports that the existing veterinary and animal health staffing levels were insufficient⁶³.

An example of the decrease in staff over time in Victoria is given below to illustrate this trend in Australia.

FIGURE 2: Departmental staffing of veterinary officers and animal health officers (Victoria)⁶⁴

Figure 3G
Departmental staffing of veterinary officers and animal health officers

Position	Full time equivalent staff		Reduction (per cent)
	2010	2015	
Veterinary officers	21	15.2	28
Animal health officers	33.68	16.48	51
Total	54.68	31.68	42

Source: Victorian Auditor-General's Office.

The team noted that in one jurisdiction consolidation to a single state laboratory and improved courier services had resulted in a more efficient service. However in other jurisdictions private veterinarians expressed concerns about increasing costs and delays in the laboratory services required for effective surveillance.

There are some difficulties as well in providing veterinary cover in remote areas.

⁶³ E.07.22 p.31

⁶⁴ E.07.22

The Charles Sturt University in Wagga Wagga, NSW specifically focuses on students for future rural veterinary practice. Their Veterinary Science degree commenced in 2005 and has already achieved its vision of providing veterinarians for rural Australia. Efforts were noted in AAHL in Geelong and at the Veterinary faculty of Melbourne to recruit new graduates into government service or at least make them more aware of the opportunities in government work and, of course, their roles and responsibilities relating to disease notifiability etc.

There is a systematic approach to defining job descriptions and formal appointment procedures for veterinarians and other professionals.

There are differences in salaries between the jurisdictions e.g. in Tasmania veterinary salaries were reported to be about 10 000 AUD lower than elsewhere.

It must be highlighted that the team were very impressed with the extremely high level of competence, professionalism and motivation of the veterinarians met during the mission.

Strengths:

- Well trained, competent and motivated veterinary professionals.
- Solid performance management systems.

Weakness:

- Staffing levels are approaching a critical point.

Recommendation

- There should be an in depth evaluation of staffing levels at jurisdictional level with a view to ensuring a fully adequate and more consistent performance across Australia through a commitment to resourcing identified shortfalls..

I-1. Professional and technical staffing of the Veterinary Services <i>The appropriate staffing of the VS to allow for veterinary and technical functions to be undertaken efficiently and effectively.</i> 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): Appendix 1

Evidence (listed in Appendix 5): E. 01.2.3.1, E.07.22, 2M.20, 2H13.

Findings:

The veterinary para-professionals and other technical personnel cover a wide variety of staff such as veterinary nurses, animal health officers or technicians, meat inspectors, biosecurity inspectors and stock inspectors etc. They support the veterinarians in the performance of their technical duties.

The terminology of some of these veterinary para-professionals varies between jurisdictions e.g. stock inspectors and rangers now called livestock biosecurity officers or inspectors or biosecurity inspectors, and there are border quarantine officers, lab technicians etc.

Meat inspectors may be employed directly by government, by a third party as well as by the establishment directly.

There appears to have been reductions in government staffing levels similar to the veterinarians see figure 2 in the previous competency (C1.1A), and similar concerns were expressed concerning current staffing levels.

There are various degrees, diplomas, certification courses and levels laid down for specific duties together with on the job training; so that all these veterinary para-professionals have the appropriate levels of training and qualifications for carrying out their day to day duties.

It was noted that in one jurisdiction the Veterinary Surgeons Act, 1936 was under review to allow for the recognition of stock/animal health inspectors as veterinary para-professionals. This was especially for remote areas where there were no available veterinarians.

There is a systematic approach to defining job descriptions and formal appointment procedures for veterinary para-professionals.

Strengths:

- Competent and stable veterinary para-professionals are embedded in the animal health system and recognised by stakeholders and the public;
- Solid performance management systems, similar to veterinarians.

Weakness:

- Staffing levels may be approaching a critical point.

Recommendations:

- There should be an in depth evaluation of staffing levels in all jurisdictions with a view to ensuring a fully adequate and more consistent performance across Australia through a commitment to resourcing identified shortfalls.

I-2 Competencies of veterinarians and veterinary para-professionals	Levels of advancement
<i>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.</i>	1. The veterinarians' practices, knowledge and attitudes are of a variable standard that usually allow for elementary clinical and administrative activities of the VS.
A. Professional competencies of veterinarians including the OIE Day 1 competencies	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): Appendix 1

Evidence (listed in Appendix 5): E.01.2, E.01.2.3.1, E. 07.2.

Findings:

All veterinary degree programs in Australia are accredited by the Australian Veterinary Boards Council (AVBC)

Currently there are seven accredited veterinary schools in Australia. They are at the University of Melbourne (Vic), University of Queensland (Gatton, QLD), University of Sydney (NSW), Charles Sturt University (Wagga Wagga, NSW), Murdoch University (WA), James Cook University (Townsville, QLD) and the University of Adelaide (SA). The seven veterinary schools supply over 400 graduates each year. The qualifications awarded by these schools satisfy the formal academic requirements for registration by all Australian veterinary registration boards.

All Australian veterinary courses include strong undergraduate programs in the health of farmed livestock, horses, companion animals, and wildlife, as well as in biosecurity and veterinary public health. A greater focus has been placed recently on abattoir inspection training in some schools (e.g. Murdoch University has piloted a final year vocational training program and this is to be expanded elsewhere). The veterinary schools also provide research, continuing education and postgraduate training relevant to Australia's livestock industries.

At some veterinary schools e. g. Charles Sturt (Wagga Wagga), rural veterinary practice receives particular emphasis.

Accreditation of veterinary schools is an integral part of quality assurance procedures for veterinary education. In general, the process operates regionally and includes a number of countries. In Australia and New Zealand the system is managed by the Veterinary Schools Accreditation Advisory Committee (VSAAC) which reports to the Australasian Veterinary Boards Council (AVBC). Veterinary Schools accredited are all Australian Veterinary Schools, NZ Vet Schools, the Royal College, South Africa, other European schools and the American Veterinary Medical Association (AVMA). The latter has accredited the veterinary schools of Melbourne, Perth (Murdoch), Queensland and Sydney.

Strengths:

- Excellent veterinary training at under- and post-graduate level at Australia's veterinary schools.
- Implementation of an OIE Veterinary Educational Establishments Twinning Agreement such as by the University of Queensland with Nong Lam University (Vietnam).

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): Appendix 1

Evidence (listed in Appendix 5): E.01.2, E. 05.3.2, E. 07.2, 2H.13.

Findings:

Universities, agricultural colleges and other registered training organisations within the Australian vocational education and training sector provide training for veterinary nurses, animal technologists, stock inspectors, farm managers and others involved in the care of animals. Students can participate in full-time training, mix part-time training with work or begin their program while they are still at school. One of the hallmarks of the system is the active involvement of industry groups and employers in providing training opportunities and work experience. This training meets the requirements of national competency standards and vocational qualifications under the Australian Qualifications Framework. The standards are agreed by industry, professional organisations and each jurisdiction. In 2012, a suite of vocational qualifications in biosecurity emergency management at Certificate III, Certificate IV and Diploma levels were nationally endorsed by the National Skills Standards Council. These will provide an alternative training and qualification pathway for people engaged in EAD preparedness and response activities, including government employees, livestock industry representatives and livestock producers.

Veterinary Para-professional/Animal Science courses

A range of veterinary para-professional courses are offered in Australia. These are offered at bachelor degree level across a number of institutions. These courses include: Bachelor of Animal and Veterinary Bioscience (The University of Sydney); Bachelor of Animal and Veterinary Biosciences (LaTrobe University); Animal and Veterinary Bioscience (major) (The University of Queensland); Bachelor of Science major: Animal Health and Disease (The University of Melbourne); Bachelor of Veterinary Technology and Master of Animal Science (The University of Queensland); Bachelor of Science - Veterinary Bioscience (The University of Adelaide); Bachelor of Science – Veterinary Bioscience (Federation University, Ballarat, Victoria).

A range of registered training organisations and technical and other institutions (such as Technical and Further Education – TAFE) around Australia offer certificate courses in livestock, companion and laboratory animal studies. These include Certificate II, III and IV levels. The Veterinary Nursing qualification is a Certificate IV qualification.

Meat Industry training

Education required for meat industry licencing is offered through the National Meat Industry Training Advisory Council Limited (MINTRAC), see <http://www.mintrac.net.au> The MTM11 Australian Meat Industry Training Package covers meat industry qualifications from entry level (Certificate I) to Vocational Graduate Diploma for the meat processing, meat retail, smallgoods, game harvesting and food services sectors. It provides industry competency standards for meat industry jobs including labourers, food services workers, smallgoods

operators, wild game harvesters, slaughterers, boners, butchers, meat inspectors, QA officers, supervisors and managers.

Under the Australian Export Meat Inspection Scheme, AEMIS meat safety inspectors (AAOs and FSMAs) performing post-mortem duties must have a Certificate III in *Meat Processing (Meat Safety)* qualification issued within the past 5 years and attain a *Certificate IV Meat Processing (Meat Safety)* qualification within 12 months of appointment

Certificate III in Meat Processing (Meat Safety): Certificate III in Meat Processing covers ante- mortem and post-mortem inspections, maintaining food safety of meat etc.

Certificate IV in Meat Processing (Meat Safety): The Certificate IV is the qualification required to work as a domestic or export meat inspector. The course is ideal for existing meat industry workers because it's delivered through workshops, flexible delivery and online.

Laboratory training/qualifications

AAHL, all state government animal health laboratories and major private veterinary laboratories in Australia are accredited by the National Association of Testing Authorities (NATA) for performing a range of laboratory tests, including those for trade and public health related animal diseases. The NATA Veterinary Testing Application Document (Appendix A: Veterinary Testing ISO/IEC 17025 Application Document July 2014) provides an outline of management and technical requirements for fulfilling ISO/IEC 17025 (veterinary testing) standards, including qualifications.

Laboratory staff competency partly demonstrated through their training records is one of the requirements for maintaining the NATA accreditation status of their laboratories. NATA recognises a range of trainings relevant to laboratory staff competency which can be structured/non-structured, technical/non-technical, formal/informal, on-site/online, etc. This training may be delivered through scientific conferences/seminars, tertiary institutes, Australian and New Zealand College of Veterinary Scientists, medical laboratory diagnostic technologies, etc.

Veterinary Nursing

A Certificate IV in Veterinary Nursing, being the industry-standard qualification for veterinary nurses in Australia, is considered by the veterinary profession to be the basic qualification required to provide competent support to a Veterinary Practice. A Certificate II in Animal Studies is a step towards this objective and needs to be completed prior to starting Certificate IV in Veterinary Nursing.

Strengths:

- Strong entry requirements and a wide variety of specialised training.
- Staff generally very competent and well trained for their roles.

Weakness:

- Veterinary para-professionals, except for veterinary nurses in Western Australia, are not registered or evaluated by jurisdictional Veterinary Boards.

Recommendation:

- Veterinary Boards to develop registration procedures for veterinary paraprofessionals in accordance with the OIE Terrestrial Animals Health Code. Refer to **CC III-5**.

I-3 Continuing education (CE) ⁶⁵	Levels of advancement
<i>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.</i>	1. The VS have no access to 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): Appendix 1

Evidence (listed in Appendix 5): E.01.2, E.01.2.2.2, E.01.2.8, E. 05.3.1, 2PP.16.

Findings:

Continuing Professional Development (CPD)⁶⁶ is expected of registered veterinarians in all States and Territories in Australia. All jurisdictions have agreed, through the Australasian Veterinary Boards Council (AVBC) and the Australian Veterinary Association (AVA), that a minimum of 60 CPD points must be attained over a consecutive three year cycle. CPD points are described as either structured or unstructured. Structured CPD points are allocated to activities which can be externally validated such as attendance at conferences and workshops, completion of courses and authoring or refereeing of peer reviewed articles. At least 15 of the minimum 60 CPD points must be structured points. Unstructured CPD points are allocated to activities such as private reading, clinical rounds, mentoring and unassessed computer based courses. State registration boards require minimum levels of CPD activity to retain registration.

VetEd⁶⁷ supports the continuing professional development (CPD) of AVA members by providing guidance on maintaining up-to-date professional standards and a means of recording your learning. The AVA understands CPD as the education of veterinarians following completion of their formal training. It consists of any educational activity relevant to the scope of the veterinary profession, which helps to maintain, develop or increase knowledge, problem-solving or technical skills. Detailed information can be accessed under <http://www.ava.com.au/veted>.

Jurisdictions provide a wide spectrum of in-service training for veterinary and biosecurity staff. This includes comprehensive induction training for newly appointed staff, as well as focussed training on all relevant biosecurity aspects and management procedures.

A specific focus is directed at increasing staff competencies and professional development through post-graduate training. The DAWR supports continuing education including study towards membership of the Australian and New Zealand College of Veterinary Surgeons in a wide variety of specialisations including veterinary epidemiology, animal welfare, cattle medicine etc. See <http://www.anzcvms.org.au/info/home>.

DAWR and the jurisdictions also support staff in undertaking other post graduate courses including post graduate courses on veterinary public health and veterinary surveillance offered by Australian universities. For example, the Masters of Veterinary Public Health offered by Sydney University has a particularly large number of graduates working in

⁶⁵ Continuing education includes Continuous Professional Development (CPD) for veterinary, professional and technical personnel.

⁶⁶ <http://www.vpb.nsw.gov.au/continuing-professional-development>

⁶⁷ <http://www.ava.com.au/veted>

government veterinary services, most of whom receive some form of support from their employer to undertake this study.

The maintenance of the status of accreditation of veterinary nurses, accredited under the Accredited Veterinary Nurse Scheme, requires evidence of continuing professional development.

Strengths:

- Implementation of CPD for registered veterinarians by all Australian veterinary boards and the requirement of proof of CPD for maintenance of registration.
- Extensive in-service training of staff to increase competencies and support of professional development through post-graduate training.

I-4 Technical independence <i>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).</i>	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): Appendix 1

Evidence (listed in Appendix 5): E.01.2, E.07.1, E.07.2.

Findings:

The technical decisions are made and implemented in general accordance with the OIE obligations.

The establishment of AHA has provided for a unique and excellent forum for consultation and the development of joint programs between the Commonwealth, states and territories, private industry and service providers. Although there was no evidence or cases identified, the high reliance on private sector funding in some jurisdictions or areas creates at least a perceived conflict of interest.

There is a mechanism for submission of public complaints directly to the Minister of Agriculture and Water Resources' office. These will be referred down the chain of command to a professional (e.g. veterinarian) for technical reply.

Strengths:

- Strong scientific base for decision making.
- Strong transparency in reporting decisions taken.
- Effective consultation mechanism involving all interested parties.

Weakness:

- The high reliance on private sector funding in some jurisdictions or areas, and direct employment of inspectors by entities being inspected creates at least perceived conflicts of interest.

Recommendation:

- Institute administrative measures to reduce the risk of possible conflicts of interest.

I-5 Stability of structures and sustainability of policies	Levels of advancement
<i>The capability of the VS structure and/or leadership to implement and sustain policies over time.</i>	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): Appendix 1

Evidence (listed in Appendix 5):E.01.2, E.01.2.8.

Findings:

Despite the fact that the Department of Agriculture and Water Resources has undergone numerous structural changes over the last 10 years for a variety of reasons, the capacity and leadership to implement sustainable policies has been stable.

Although these structural changes have resulted in some shifting of VS staff between different Divisions or Branches within the Department, similar roles and types of work have generally been maintained throughout. For example, the main Division involving animal health and veterinary public health policy in the mid-2000s used to be named Product Integrity Animal and Plant Health (PIAPH). This closely integrated animal health and related food safety policy and technical functions within the department. The Australian Quarantine and Inspection Service (AQIS), which was also part of the then Department of Agriculture, Fisheries and Forestry, implemented all border related activity, including import quarantine and inspection and export inspection and certification.

Today, PIAPH and AQIS no longer exist. Biosecurity Animal Division deals with all national (or on shore) animal health policy and program issues (via close liaison with the states and territories) as well as all technical policy/sanitary negotiation relating to imports of animals and animal products/by-products, and live exports. Exports Division manages all technical policy/sanitary negotiation and leads implementation for exports of animal products and by-products (e.g. certification at export abattoirs) and leads implementation of measures relating to live exports (e.g. certification arrangements). Service Delivery Division carries out field delivery of import inspection and quarantine for cargo, passengers and mail and export certification arrangements for animals and animal products via its regional offices and within export abattoirs.

In certain jurisdictions there has been a decrease in the number of field staff (field veterinary officers and biosecurity officers) working within the veterinary services. This has occurred as government has transitioned from endemic disease management to focus on emergency animal diseases of market access significance. While the reductions have in part been offset by the use of private veterinarians to assist with surveillance activities and regulatory requirements, such as the certification of live animals for export, this has resulted in limits on the availability of private veterinarians, as well as in creating conflicts of interest on the part of private veterinarians being asked to regulate their private clients.

I-6 Coordination capability of the Veterinary Services A. Internal coordination (chain of command) <i>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 the Codes (i.e. surveillance, disease control and eradication, food safety and early detection and rapid response programmes).</i>	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): Appendix 1

Evidence (listed in Appendix 5): E.01.2.8, E.7.22.

Findings:

Under the Australian constitution⁶⁸ state and territory governments are responsible for animal health matters within their boundaries that do not come within the authority of the Australian Government that is responsible for international animal health matters, including quarantine, export certification and trade, as well as disease reporting to the World Organisation for Animal Health (OIE). A system of inter-governmental consultative committees ensures that the levels of government (Australian, State and Territory) work together to serve the overall interest of Australia. In addition, the interests of government and industry are served through [Animal Health Australia](http://www.animalhealthaustralia.gov.au), a public company whose members include the Australian Government, state and territory government, the peak national councils of Australia's livestock industries and various key research, veterinary and educational organisations. Other national instruments are listed in Figure 3 below.

Such arrangements are critical to the effective functioning of the non-linear chain of command required under Australia's federal structure. In the event of an outbreak of an emergency animal disease other tools further strengthen the chain of command including an intergovernmental agreement on Biosecurity, a legally binding cost-sharing agreement amongst members of the Animal Health Committee and affected industries (EADRA), pre-agreement on a number of critical policies and disease strategies (AUSVETPLAN), incident command protocols that establish linear command structures in organizations in which policy and operational arms operate through matrix relationships during "peace time", and enhanced reserve powers of the Commonwealth under its Biosecurity Act (2015).

⁶⁸ <http://www.agriculture.gov.au/animal/health/system>

FIGURE 3: National instruments of livestock biosecurity⁶⁹

Figure 1C
National instruments for livestock biosecurity

<p>Intergovernmental Agreement on Biosecurity</p> <p>The Commonwealth, state and territory governments—excluding Tasmania—entered into this agreement in January 2012. It aims to strengthen the working partnership between the Commonwealth, state and territory governments, and to improve the national biosecurity system by defining the roles and responsibilities of governments and outlining the priority areas for collaboration.</p> <p>Emergency Animal Disease Response Agreement (EADRA)</p> <p>The EADRA was signed in 2002 and brings together Commonwealth, state and territory governments and livestock industry groups to prepare for, and respond to, emergency animal disease outbreaks. Animal Health Australia is the custodian of the EADRA.</p> <p>Australian Veterinary Emergency Plan (AUSVETPLAN)</p> <p>AUSVETPLAN comprises a series of manuals setting out the roles, responsibilities and policy guidelines for agencies and organisations involved in responding to an emergency animal disease outbreak. AUSVETPLAN includes nationally agreed disease strategies and response policy briefs for all diseases listed in the EADRA.</p>

Source: Victorian Auditor-General's Office.

Strengths:

- Multiple and appropriate internal coordination mechanisms.

Weakness:

- Chains of command are not all linear. Some operate through a variety of matrix structures at national and jurisdictional levels.

Recommendation:

- The Australian Chief Veterinary Officer, as the Australian technical lead in national and international fora for animal and veterinary public health, should have adequate line of sight, authority and resourcing to provide technical leadership, oversight and direction across Australia's veterinary services as appropriate.

⁶⁹ E.07.22

B. External coordination	Levels of advancement
<p><i>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.</i></p>	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.
	<p>5. There are national external coordination mechanisms for all activities and these are periodically reviewed and updated.</p>

Terrestrial Code reference(s): Appendix 1

Evidence (listed in Appendix 5): E.01.2.2.2, E.01.2.8, E. 07.7.4, E.07.22.

Findings:

The VS has established several world leading inter-jurisdictional and public-private partnerships at the national level such as:

- **Animal Health Australia** (AHA - <http://www.animalhealthaustralia.com.au>), is an innovative not-for-profit public company established by the Australian, state and territory governments and major national livestock industry organizations. It facilitates improvements in Australia's animal health policy and practice in partnership with the livestock industries, governments and other stakeholders, builds capacity to enhance emergency animal disease preparedness, ensures that Australia's livestock health systems support productivity, competitive advantages and preferred market access, and contributes to the protection of human health, the environment and recreational activities.
- **Wildlife Health Australia** (WHA - <https://www.wildlifehealthaustralia.com.au>), a not-for-profit, incorporated association and a registered charity that works in the national interest. WHA extends the work of the Australian Wildlife Health Network (AWHN) and collates information from multiple sources into a national database — the Wildlife Health Information System (eWHIS). WHA 70 engages with a large and varied group of stakeholders, has a strong One Health focus, and collects and disseminates information of relevance to animal health, public health and environmental management.

Similar initiatives were encountered in the individual States, for example:

- A partnership between the VS of **New South Wales** (delivered by the NSW DPI) and Local Land Services (LLS), including other government, industry and community stakeholders including private veterinarians is particularly critical in the consistent implementation of their animal biosecurity and welfare programs.
- **Victoria's DEDJTR** and the Department of Health and Human Services (DHHS) have collaborated regularly to jointly manage zoonotic disease threats. This working relationship was formalized by a 2010 MOU that was developed in response to a recommendation from a 2008 audit by Victoria's Auditor General on *Biosecurity Incidents: Planning and Risk Management for Livestock Disease*⁷¹.

⁷⁰ <http://www.wildlifehealthaustralia.com.au/AboutUs.aspx>

⁷¹ <http://www.audit.vic.gov.au/publications/2008-09/20081112-Biosecurity-Incidents-Livestock-Diseases.pdf>

The Team also noted coordination by the VS through strong linkages with other government institutions such as:

- Australian Border Force
- Department of Health
- Food Standards Australia New Zealand
- Department of the Environment.

Strengths:

- Extensive and effective mechanisms for external coordination.
- Private sector engagement and buy-in.
- Strong awareness of biosecurity by the general public.

Weakness:

- Possible risk of over-reliance on private sector.

Recommendation:

- Ensure appropriate private-public balance in funding.

I-7 Physical resources	Levels of advancement
<i>The access of the VS to relevant physical resources including buildings, transport, telecommunications, cold chain, and other relevant equipment (e.g. computers).</i>	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): Appendix 1

Evidence (listed in Appendix 5): E.01.2, E.01.2.2.2, E. 01.2.3.1, E.01.2.4, E.01.2.8.

Findings:

The VS at national as well as on jurisdictional level are provided with modern office and disease investigation facilities which are subjected to regular maintenance and updated based on need.

Staff from DAWR in all central and regional office locations have access to high quality internet and phone (including mobile phone) facilities. Internet and mobile phone access in remote locations is provided via mobile satellite or satellite broadband services (e.g northern coastal areas for the Northern Australian Quarantine Strategy - NAQS). All departmental staff can access the staff intranet services, *MyLink*.

All jurisdictions have access to a wide range of vehicles and other transport, based on specific needs and environmental circumstances, such as the need for 4x4 vehicles.

This availability also applies to telecommunication systems such as fixed landlines, internet and mobile phones, with satellite phones for remote areas. Staff have access to laptops and desktop computers and respective office and working area equipment such as printers etc.

Communications systems are provided and supported by a range of services including external service providers. Information is stored and shared using standard departmental platforms. Each staff member also has an individual email address and position email address during an incident response.

All facilities are provided with emergency disease response and action kits, including biosecurity dedicated equipment.

New state-of-the-art laboratory and quarantine facilities have been established, e.g. the animal health laboratory at the Elizabeth MacArthur Agriculture Institute (EMAI) and the new Post Entry Quarantine (PEQ) facility built on a Commonwealth owned site in Mickleham, Victoria.

I-8 Operational funding	Levels of advancement
<i>The ability of the VS to access financial resources adequate for their continued operations, independent of political pressure.</i>	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): Appendix 1

Evidence (listed in Appendix 5): E.01.2, E.01.2.2.2, E.07.22, EM.01.

Findings:

At the national level, funding for biosecurity programs is relatively secure. Significant financial stability is provided by a cost recovery regime under which most border activities other than passenger screening and broad policy work are fully funded by revenues that flow directly to DAWR (currently about \$235 million). In addition the most recent budget funded enhanced audits of overseas importers with cost recovery of “at the border arrangements”. A November 2014 White Paper on Biosecurity provided a further \$200 million for 45 additional staff across DAWR. While the White Paper did not provide information beyond 2015-16, DAWR expects additional support in 2016-17.

On the other hand, reductions in Commonwealth funding by the Department of Foreign Affairs and Trade (DFAT) for official development assistance (ODA) have weakened forward looking initiatives to address biosecurity risks off-shore.

In 2014-15, Animal Health Australia received core funding and \$7.5m in levy payments from DAWR. In addition, research and development work is funded through levy recipients (e.g. Meat and Livestock Australia). Chicken meat industry funding for Animal Health Australia and for industry’s share of expenditure under any chicken disease response plan is collected through a levy on all one-day-old chicks leaving commercial hatcheries⁷².

At the level of other jurisdictions, concerns about financial constraints were heard from senior Commonwealth officials, State/Territory CVOs, industry officials, AHA staff and members as well as private veterinarians and two State Auditors General. The emerging picture is of governments pushing further costs onto a private sector that already carries a significant load through cost recovery schemes (up to 100% plus overheads) and makes other important contributions under cost-sharing agreements. Several sources clearly stated that with current resourcing levels Australia would quickly be overwhelmed by a moderate to severe incursion of FMD.

This view was supported by a 2015 report from the Auditor General of Victoria that documented a decline in financial and staff resourcing for core livestock biosecurity activities. This decline has weakened the VS’s capacity to prevent, prepare for and respond to a major livestock disease outbreak, as well as concurrent smaller-scale outbreaks.

State recurrent funding for core livestock biosecurity activities was reduced by 49 per cent between 2009–10 and 2014–15 (Figure 3F below).

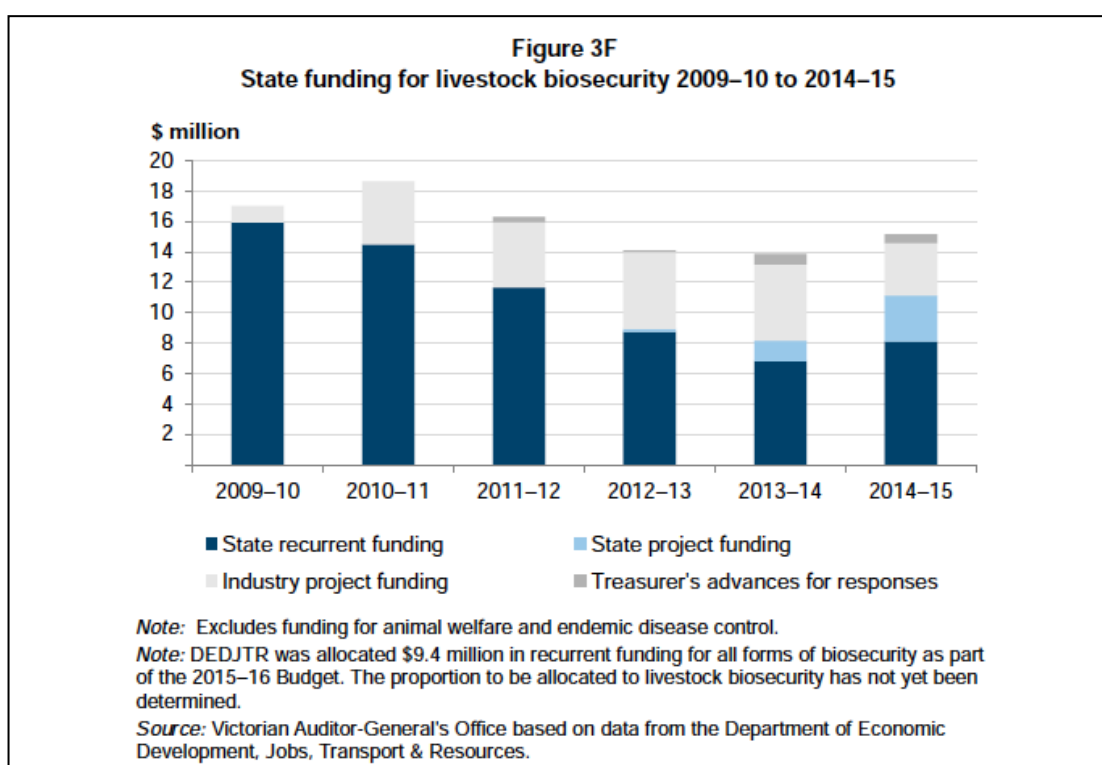
Direct funding from industry is very important to the jurisdictions but there is wide variation between them from levels more than 40% to 0% as a proportion of total funding. This situation carries the risk that Industry could be forced to withdraw its funding if faced with

⁷² <http://www.chicken.org.au/page.php?id=22>

severe market or production setbacks. There are also differences in funding for endemic diseases varying from 100% to 0% as a proportion of total funding. This presents a risk of over-reliance on the private sector in some jurisdictions or areas while, in other jurisdictions or areas, industry could be encouraged to contribute more to programs that primarily and directly benefit them. Overall, an appropriate balance in private-public funding should be sought.

This funding stream covers a range of critical functions that include—but are not limited to—veterinary services, surveillance and tracing livestock movements. This decline in State recurrent funding for core livestock biosecurity activities was reported to have impacted the VS's core capability to respond to emergencies. It also increased reliance on reactive funding allocations to protect Victoria's livestock industries from emergency animal diseases.

FIGURE 4: State funding for livestock biosecurity 2009 – 2015 (Fig. 3 F)⁷³



In New South Wales the Biosecurity and Food Safety Division (BFSD) is funded largely through a consolidated revenue allocation from Treasury, supplemented by research grants from external funding agencies, and revenue from diagnostic services which can total up to \$8.5 million in any given financial year. The Local Land Services (LLS) provides veterinary services funded effectively from rates levied on landholders across NSW (Animal Health Levy), which for the 2014/2015 financial year had been budgeted to the amount of AUD 30.8 million. Administration of the levy system is subject to annual review by a regional Board comprised of 3 land owner representatives and 4 government appointed members throughout the 11 different state regions.

⁷³ E.07.22

Strengths:

- Multiple private sector funding sources.

Weakness:

- Resourcing levels may be approaching a critical point in some jurisdictions, hence the Team considers that funding for all aspects of the VS - which incorporates consideration of all jurisdictions – is not adequate and does not meet the requirement of a level 5 of advancement.

Recommendations:

- An in depth review of resourcing levels and strategies is recommended to complement the review of staffing levels at jurisdictional level recommended under **CC II-1A**.
- Examples of successful funding mechanisms through targeted animal health levies may be considered for broader application.

I-9 Emergency funding	Levels of advancement
<i>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.</i>	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): Appendix 1

Evidence (listed in Appendix 5): E.01.2, E.01.2.2.2, E.01.2.8, E.07.22.

Findings:

Funding for emergency animal disease situations is addressed by the **Emergency Animal Disease Response Agreement (EADRA)**⁷⁴ under which funding for an outbreak is derived from a cost sharing arrangement between Commonwealth/State or Territory governments and the affected industry or industries depending on the categorisation of the outbreak (see Table). The Commonwealth Government's contribution is 50% of the total government share in each case. The State or Territory in which the Incident has occurred will normally meet the cost of the Incident Definition Phase. Where industry is not able to meet its cost sharing obligations, the Commonwealth will initially meet the industry's obligation and the industry has an obligation to repay the Commonwealth.

Parties will apply principles of Cost Sharing for the conduct of an EADRP in accordance with the following table:

Category of Disease	Government Funding	Industry Funding
Category 1	100%	0%
Category 2	80%	20%
Category 3	50%	50%
Category 4	20%	80%

DAWR finance officials advised that decisions on funding are made by the Departments of Finance of each jurisdiction – i.e. not requiring a cabinet decision in each instance.

Strengths:

- Pre-negotiated financial agreement amongst all stakeholders (EADRA).

Weakness:

- Adequacy of emergency operational funding may not offset the human resources limitations discussed under **CC II-1.A**.

⁷⁴ <http://www.animalhealthaustralia.com.au/programs/emergency-animal-disease-preparedness/ead-response-agreement/>

I-10 Capital investment	Levels of advancement
<i>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.</i>	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): Appendix 1

Evidence (listed in Appendix 5): E.01.2, E.01.2.4, E.01.2.8.

Findings:

A major capital investment project undertaken by the DAWR is consolidating its animal and plant health quarantine facilities into a single national facility at Mickleham. This new 144 hectare state-of-the-art facility cost \$380 million to build and will include new laboratory and research equipment. Opened in November 2015, this facility will consolidate nearly all operations delivered across Australia into one site from 2018.

Constructed in 1983 at a cost of \$185 million, the Australian Animal Health Laboratory at Geelong has an estimated replacement value of \$1.5 billion. Its operations, including both diagnosis and research, are co-funded by CSIRO and DAWR through an ongoing partnership agreement that provided \$49 million in 2013/14 and in 2014/15.

Jurisdictions have also undertaken capital investments. A few examples include:

The Department of Agriculture and Food **Western Australia** (DAFWA) has several time-bound projects that are partially or fully funded by the Western Australian government's Royalties for Regions program, where up to 25% of the State's mining and onshore petroleum royalties is being returned to regional areas as additional investment in projects, infrastructure and community services. The 4 year DAFWA Boosting Biosecurity Defences Project is an example of that supported by the Royalties for Regions program and will address early detection of declared pests and diseases, preparedness to respond to incursions of significant pests and diseases, awareness and compliance with new legislation, community engagement and the adoption of new technology.

In **New South Wales** the Elizabeth MacArthur Agricultural Institute (EMAI) is the Department of Primary Industries (DPI) Centre of Excellence for Animal and Plant Health. The Institute's facilities underwent a major refurbishment in 2012 and new buildings were constructed as part of a \$57 million program of work. These now offer joint venture opportunities for primary industries research in plant and animal biosecurity, including:

- new high level containment facilities with the capacity to conduct research to prepare and manage a large scale outbreak of emergency animal or plant diseases;
- existing animal and plant health facilities upgraded to world standards nursery facilities, insectaries and field sites for a range of research activities.

The **Queensland** Department of Agriculture and Fisheries is investing in a three-year program to develop a new Biosecurity Information Management System. The new system will provide a single online data repository, with automated reporting that allows BQ staff to analyse data across biosecurity programs and regions to better manage biosecurity risks.

The program will enable seamless and rapid (real-time) data gathering and analysis which can enhance a faster response to protect the future viability of Queensland agriculture. The new system is expected to be delivered in 2016.

Other jurisdictions implemented minor capital projects such as in **South Australia** for the implementation of a new surveillance and emergency information software package, Yes-Max and the Intensive Animal Farming Initiative announced by the **Tasmanian** State Government for the 2013/14 budget which provided \$2.75 million as grants to primary producers transitioning from layer hen cages or sow stalls in compliance with new Animal Welfare Regulations.

Strengths:

- Recent investments reflect strategic, forward looking initiatives.

I-11. Management of resources and operations	Levels of advancement
<i>The capability of the VS to document and manage their resources and operations in order to analyse, plan and improve both efficiency and effectiveness.</i>	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): Appendix 1

Evidence (listed in Appendix 5): E.01.2, E.01.2.2.2, E.01.2.3.1, E.01.2.4, E.01.2.8, E.07.22, E.07.25.

Findings:

The Department of Agriculture and Water Resources (DAWR) is served by an Interim Inspector-General for Biosecurity who is appointed by and reports directly to the Minister. The mission of the Interim Inspector-General of Biosecurity⁷⁵ (a position that will be permanent once the Biosecurity Act of 2015 comes into effect) is to enhance the integrity of Australia's biosecurity systems through independent evaluation and verification of the performance of these programs across the biosecurity continuum – pre-border, border and post-border.

DAWR also has a Compliance Division which works collaboratively across the department to develop and implement a compliance strategy that builds on the existing Biosecurity Compliance Strategy. It ensures the most efficient and effective deployment of risk management tools to achieve biosecurity compliance, not just at the border, and develops compliance policy and standards for all of the regulatory programs. The Division builds consistency in regulatory approaches and identifies opportunities for reducing regulatory burden, aligns approaches to compliance for clients, and applies and improves analytics and intelligence for targeting of compliance activities.

To support its people DAWR has an advanced performance management system that is mandatory for all employees. To assess "am I doing my job" the employee reviews with the supervisor his/her productivity, participation, communication and development. This review informs the employee's annual personal learning and development agreement. The process operates on an annual cycle (Aug 1 to July 31st) with three check-in points through the year (2 interim, 1 final). A "fully effective" rating is required for pay progression, with an opportunity to recover a lost increment if performance improves to "fully effective" by the next quarterly check point. Continued non-performance is documented and may lead to actions such as i) movement, ii) reduced classification to top of next lower level or iii) termination (rarely required). DAWR has a mandatory learning policy and all staff must complete a program of eight online training courses. A range of additional online and face to face corporate training courses are available to support staff in performance management, finance, record keeping, risk management and leadership.

In other jurisdictions, the Auditors General of Victoria and Queensland have reported on biosecurity in 2008, 2011 and 2015 – finding strengths and weaknesses - and Audit services are provided to the Department of Primary Industry and Fisheries of New South Wales under a services agreement. The Director Human Resources, Risk and Audit has a direct reporting line to the Chief Executives on matters of strategic and policy advice in risk management and

⁷⁵ www.igb.gov.au

audit activities. The role is responsible for monitoring and overseeing risk management and audit activities, facilitating the operations of the Risk and Audit Committee and assisting departmental managers to assess risk and develop treatment plans.

Biosecurity and Food Safety NSW, a Division of NSW DPI, have an Annual Action to monitor progress against priority outcomes. All monitoring and reporting is done electronically using an online system.

The Queensland Government Internal Audit Service (QGIAS) is a business unit within the Department of Environment and Heritage Protection that provides internal audit services to DAF and four other Queensland Government agencies. QGIAS provides independent assurance and advice to the Director-General, senior management and the Audit and Risk Management Committee.

In Western Australia the DAFWA Regulatory Standards project that provides training, advice and other services to support regulatory activities under the Biosecurity and Agriculture Management Act 2007 and other legislation administered by the department. The project also assists programs to develop, implement and review operational procedures for regulatory activities.

Strengths:

- Widespread use of advanced management and evaluation processes e.g. Interim Inspector-General for Biosecurity at the Australian Government level.

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 <i>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.</i>	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): Appendix 1

Evidence (listed in Appendix 5): E.01.2, E.01.2.2.2, E. 01.2.3.1, E.07.2 p. 79, E.12.3.

Findings:

A network of world-class animal health laboratories is operated by the Australian Commonwealth, state and territory governments, CSIRO, veterinary schools and the private sector. This network provides diagnostic and research services for endemic and exotic animal diseases, including transboundary animal diseases and zoonoses. CSIRO-AAHL and some jurisdictional laboratories also serve as national and/or OIE reference laboratories for specific EADs, providing in depth investigational and research capacities, as well as training.

Inventory of laboratories: 1. Government: There are 8 in total - AAHL as the national animal health reference laboratory and there are government laboratories in NT, QLD, NSW, VIC, SA, TAS and WA. Some jurisdictional governments have multiple laboratory facilities at different locations (i.e. VIC has 3 facilities; WA has 2 facilities). SA has its own laboratory building that is leased to a private provider, Gribbles Veterinary Pathology that, under contract, provides official veterinary diagnostic services. AAHL has facilities up to physical containment (PC) level 4 (i.e. the maximum level) for both testing and animal studies. NT, QLD, NSW and VIC have testing facilities up to PC3 level. WA, SA and TAS have testing facilities up to PC2 level. NSW also has PC3 level facilities for animal holding suitable for in-depth investigational study and research. **2. Private:** There are 9 private or industry based laboratories that provide NATA-accredited 'Veterinary Testing' services domestically and/or internationally. Some of the private laboratories such as Gribbles and IDEXX have multiple facilities located at different jurisdictions. They are all PC2 facilities for testing only.

National laboratory responses to emergency animal disease (EAD) incidents and outbreaks are primarily supported by the Laboratories for Emergency Animal Disease Diagnosis and Response network (LEADDR). In 2014, a revision of the Australian Veterinary Emergency Plan (AUSVETPLAN) Laboratory Preparedness Manual, a key operational and resources manual for laboratory diagnosticians was completed.

Some state/university/private laboratories also participate in providing national laboratory services to support specific national disease management programs (e.g. Johne's disease, anthrax, arboviruses) or for ad hoc business needs.

Some jurisdictions have outsourced laboratory testing to the private sector, and a number of private animal health laboratories are therefore important to Australia's overall EAD testing capacity.

National laboratory services at the operational level (scientific/technical/policy) are provided by the **Commonwealth Scientific and Industrial Research Organisation (CSIRO) Australian Animal Health Laboratory (AAHL)**, Australia's national animal health reference

laboratory. AAHL is an internationally renowned diagnostic and research laboratory for emergency animal diseases, including those exotic to Australia or of public health concern. CSIRO-AAHL is a national facility that is one of six major high-containment animal health laboratories in the world. It is an OIE or national reference laboratory for a number of transboundary animal diseases. CSIRO-AAHL develops and improves diagnostic technologies, provides laboratory services for exotic and other major EADs, and provides independent scientific advice. It also plays a key role in transferring testing capabilities for major EADs to state and territory government animal health laboratories and, if appropriate, other laboratories under controlled quality assurance conditions.

Animal Health Australia contributes to Australia's network of animal health laboratories by managing **AUSVETPLAN**, through their internal **National Animal Health Laboratory Coordination Program** and via management of the **Australian Animal Pathology Standards Program (AAPSP)**.

The **Laboratories for Emergency Animal Disease Diagnosis and Response (LEADDR)** network consists of members from the Australian Government, CSIRO-AAHL, and state and territory government laboratories. The network aims to standardise or harmonise testing services for targeted EADs of terrestrial and aquatic animals in all member laboratories.

The OIE team heard concerns from some clients including private veterinarians and noted concerns by the AVA⁷⁶ about the loss of professional competencies (e.g. pathologists), slower provision of test results and rising costs following closure of some smaller labs and reduced personnel at others. On the other hand the team observed improved capacity and expertise through innovative use of centralized laboratories and accredited private lab services in two jurisdictions.

The 2007 equine influenza outbreak demonstrated the high level competency of all jurisdictional laboratories. As a result of this experience, the diagnostic role of all these laboratories has been elevated such that diagnosis can be done at the same time as samples are sent to Geelong.

The Australian Centre for International Agricultural Research (ACIAR) Annual Operational Plan (AOP) is key communications document on operational issues with partners and stakeholders engaged in research to support sustainable development. The engagement of AAHL and other veterinary scientists in such research serves multiple purposes. These range from gathering insights into new and emerging issues involving animal, human and/or environmental health in the region to building capacity for early off-shore action where prevention is most efficient and effective. The AOP is presented on a region/country basis, with priorities for each grouped into research program areas along with detailed project listings. The AOP provides a focal point for project development around these priorities. The AOP is the result of detailed consultations with partner countries, Australian organisations and government agencies. See <http://aciar.gov.au/publication/aop2015-16>.

Strengths:

- Collaborating laboratory network.
- Creative and effective use of arrangements with the private sector in some jurisdictions.

Weakness:

- Possible areas of reduced rural laboratory services in some jurisdictions.

⁷⁶ <http://www.ava.com.au/gap>

II-1 Veterinary laboratory diagnosis B. Suitability of national laboratory infrastructures <i>The sustainability, effectiveness and efficiency of the national (public and private) laboratory infrastructures to service the needs of the VS</i>	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): Appendix 1

Evidence (listed in Appendix 5): 2PP.11, 2PP.12, 2PP.17, 2PP.18, 2M.37.

Findings:

Australia enjoys a national network of well-equipped laboratories (see list in CC II-1.A) with infrastructure that clearly meets its requirements. The centrepiece of the Australian Animal Health Laboratory (AAHL) opened in 1983 at Geelong. Its operations include both diagnosis and research. It is maintained and operated by a staff of 60 engineers and overseen by national and international auditors (DAWR, Office of the Gene Technology Regulator, Department of Health – Security Sensitive Biological Agents, NATA and its own international panel of biosafety experts).

In 2012 the Elizabeth MacArthur Agricultural Institute (EMAI) in **New South Wales** underwent a major refurbishment. This \$57 million program of work included new high level containment facilities with the capacity to prepare and manage a large scale outbreak of emergency animal diseases, and upgrades of existing animal health facilities to world standards. The diagnostic and research complex is a model of coordination and efficiency.

Both AAHL and EMAI have strategies whereby personnel are cross-trained and space/equipment are shared in order to maximize resources and expedite results. In the event of a major disease outbreak the laboratories can quickly scale up to very high capacity.

At EMAI robotics are utilized for processing large number of tests, as was done during the EI outbreak. Various diagnostic tests can be conducted simultaneously and results can often be provided on the day of sample reception.

In South Australia under an innovative arrangement the State central laboratory facility complete with a post mortem suite is leased to a private company from which the government then contracts a wide range of laboratory services beyond the scope of what they might otherwise afford.

AAHL and EMAI also lease excess laboratory facilities (e.g. high containment) to commercial parties to conduct their own laboratory research. AAHL is also able to perform laboratory or animal study activities on a commercial basis for third parties.

It was noted that previous regional laboratories in Queensland at Toowoomba and Townsville were now closed.

Strengths:

- State of the art facilities reflect a commitment to EAD preparedness.

II-2 Laboratory quality assurance	Levels of advancement
<i>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.</i>	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): Appendix 1

Evidence (listed in Appendix 5): E.01.2, E.01.2.3.1, E.01.2.4, E.01.2.8; 2PP.13, 2PP 14, 2PP15.

Findings:

All government and most private animal health laboratories in Australia are accredited to the ISO/IEC 17025:2005 standard which is administered by the **National Association of Testing Authorities (NATA)**⁷⁷ – a member of the International Laboratory Accreditation Cooperation. NATA accreditation is obligatory for laboratories that participate in official EAD testing. Laboratory facilities that are accredited by NATA for the ‘Veterinary Testing’ field can be found on the relevant NATA website (<http://www.nata.com.au/nata/orgs-and-facilities>).

To ensure quality assurance for laboratory services, Australian laboratories have collaborated to develop and evaluate new tests for EADs, and to produce a comprehensive series of Australia and New Zealand Standard Diagnostic Procedures for specific EADs. These procedures reflect the relevant international standards prescribed by the OIE. This work has been supported by an AHC Sub-Committee on Animal Health Laboratory Standards (SCAHLs) that served as the national network for animal and veterinary public health laboratories in Australia. SCAHLs maintained professional and technical standards for animal health laboratory services within member laboratories, and developed and evaluated new tests. This included overseeing the Australian National Quality Assurance Program (ANQAP) and producing the Australian and New Zealand Standard Diagnostic Procedures.

In December 2014, as part of its Smaller Government Reform Agenda, the Australian Government announced that the operations of SCAHLs will cease. The OIE PVS Team heard many comments about the valuable role performed by SCAHLs and the need for this work to continue. It notes that AHC has committed to develop alternative arrangements to ensure that national laboratory standards are maintained and that experts who provide laboratory-related advice on Australia’s national animal health system come together as needed.

The diagnostic operations at AAHL are conducted under NATA accreditation to ISO/IEC 17025:2005 and its function as an international proficiency testing (PT) provider for exotic disease agents under ISO/IEC 17043:2010. In addition to NATA accreditation AAHL maintains certification to AS/NZS ISO 9001:2008 for its Quality Management System as well as AS/NZS ISO 14001:2004 for its Environmental Management System.

The **Laboratories for Emergency Animal Disease Diagnosis and Response (LEADDR)** network provides proficiency testing (PT) panels to member laboratories (each state laboratory) for diseases of interest (see document 2PP 14). This is administered through AAHL, and complies with the requirements of ISO/IEC 17043:2010 “Conformity assessment – General requirements for proficiency testing”. In 2014, 19 rounds of PT were sent out to

⁷⁷ <http://www.nata.com.au/nata/about-nata/international>

network laboratories for all of the current terrestrial LEADDR identified emerging animal diseases: avian influenza (influenza A), Newcastle disease virus (NDV), bluetongue virus (BTV), Hendra virus and foot and mouth disease (FMD). In total 140 panels were distributed under the LEADDR PT program, which was an increase of 12 from 2013 (total 128). Australian National Quality Assurance Program (ANQAP) (see below) provided PT panels for BTV serology, white spot syndrome virus (WSSV) and ostreid herpesvirus 1 microvariant (OsHV-1 μ var) PCR. Results of PT testing have been reported and discussed at monthly LEADDR teleconferences or specific working group meetings.

The **Australian National Quality Assurance Program (ANQAP)**⁷⁸ provides proficiency testing (PT) programs to support continuous improvement of individual laboratories in EAD testing performance. ANQAP is an international PT provider; it supports a range of PT programs for veterinary serology, virology and bacteriology on a fee-for-service basis. Most PT programs are used by laboratories that perform veterinary tests associated with quarantine, export health certification and disease control programs. About 26 animal health laboratories in Australia, New Zealand, Asia, Europe, Africa and North America currently participate in various ANQAP PT programs. CSIRO-AAHL and AHA, through AHA's Australian Animal Pathology Standards Program, also collaborate with other laboratories in Australia and overseas to develop and implement specific PT programs for quality assurance in diagnostic pathology.

For professional development, Australian laboratory networks have supported the activities of the Australian Association of Veterinary Laboratory Diagnosticians and other networks for laboratory specialty areas.

Strengths:

- Support for laboratory capacity building including quality assurance in the SEA region.

Recommendation:

- Functions previously performed by SCAHLS were essential and should continue.

⁷⁸ <http://www.anqap.com/>

II-3 Risk analysis	Levels of advancement
<i>The authority and capability of the VS to base its risk management measures on risk assessment.</i>	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): Appendix 1

Evidence (listed in Appendix 5): E.07.2, E.07.22, E.07.25, E.07.26, PP.05.

Findings:

Australia's biosecurity requirements are generally based on standards, guidelines and recommendations established by international organisations, including the World Organisation for Animal Health (OIE). Sometimes, additional measures are needed to reduce import risk to a level that protects Australia's unique environment and disease status.

A regulated **import risk analysis (IRA)**⁷⁹ process came into effect in 2007. A Biosecurity import risk analysis unit (B)IRA⁸⁰ performs assessments consistent with Australia's international rights and obligations. The IRA report assesses the biosecurity risks and, where appropriate, recommends risk management measures. The IRA process provides for public consultations, including consultation on the draft report. Risk assessments are available on-line⁸¹, thus adding to transparency.

The Appropriate Level of Protection (ALOP) adopted by Australia is often regarded as very high by countries seeking to export animals or products to Australia. However this is defended as being closely linked to the country's high biosecurity status and applied in ways that respect its international obligations under the World Trade Organization (WTO) Agreement on Sanitary and Phytosanitary Measures and relevant international animal health standards. Australia's high sanitary status and resultant approach to biosecurity is reflected in the Biosecurity Act 2015 (section 5) which states that; *"The Appropriate Level of Protection (or ALOP) for Australia is a high level of sanitary and phytosanitary protection aimed at reducing biosecurity risks to a very low level, but not to zero."*

The Australian Government, through the Department of Agriculture, began an examination of Australia's IRA process in July 2014. The purpose was to identify issues with the process and look for opportunities to improve it. The most important element of the IRA examination was stakeholder consultation, which took place from July to September 2014.

The department evaluates the animal disease status of trading partner countries and potential trading partners, and the competency of their veterinary authorities. The evaluations

⁷⁹ E.07.2 p.95-96

⁸⁰ PP.05 - <http://www.agriculture.gov.au/SiteCollectionDocuments/ba/publications/qmacconference2003/import-risk-analysis-handbook-2011.pdf>

⁸¹ <http://www.agriculture.gov.au/biosecurity/risk-analysis/ira/final-animal>

are typically comprehensive desk assessments, followed by on-site (in-country) verification visits.

To gain access to Australian markets, the competent authorities of potential trading partners must submit an application that demonstrates their ability to manage biosecurity risks in their country and comply with Australia's import requirements for the commodities that they want to export to Australia.

As it inspects incoming international mail at 4 centres DAWR aims to screen only the mail that is targeted as a result of its risk analysis and the processes employed by each gateway facility are generally consistent⁸². Risk analyses are also applied in relation to border biosecurity measures applied to cargo and passengers (air and sea). This includes passenger and entity (e.g. importer) risk profiling, detailed work instructions for border inspection activities, risk based targeting and enforcement, and the pursuit and gaining of prosecutions.

Risk analysis is also used by State jurisdictions. For example **Victoria** is now developing a tool to assess animal disease threats to Victoria. Once completed, the tool will be used to prioritise future surveillance and preparedness activities.

FIGURE 5: Development of DEDJTRs animal disease risk assessment tool

Figure 2A
Development of DEDJTR's animal disease risk assessment tool

Stage	Task	Status
Stage 1	Review current literature on animal disease risk assessment methods using sources within and outside of DEDJTR.	Complete
Stage 2	List disease threats and develop a test panel of 10 diseases to validate the risk assessment process.	Complete
Stage 3	Develop the risk assessment process, tools and metrics and test these using the test panel diseases.	Not yet completed
Stage 4	Assess high priority animal disease threats.	Not yet completed
Stage 5	Develop an implementation plan to assess the remaining listed animal disease threats.	Not yet completed

Note: This Figure reports progress as at 15 July 2015.

Source: Victorian Auditor-General's Office.

In Queensland a conceptual risk management framework was piloted in the Animal Biosecurity and Welfare Program in 2009-10.

Strengths:

- A well-established Animal Biosecurity Branch within DAWR conducts risk assessments for imports of animals, animal products and biologicals.

⁸² E.07.26

II-4 Quarantine and border security	Levels of advancement
<i>The authority and capability of the VS to prevent the entry and spread of diseases and other hazards of animals and animal products.</i>	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 ⁸³ 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): Appendix 1

Evidence (listed in Appendix 5): E.07.2 p. 95, E. 07.23, PP.06, , 2H.1, 2H.7, 2M.1, 2M.2, 2M.4, 2M.5, 2PP.4, 2PP.17, 2H.4, 2H.5, 2H.6, 2H16.

Findings:

The **importation of animals and animal products** into Australia is regulated at present by the Department of Agriculture and Water Resources under the Quarantine Act 1908 and its subordinate legislation, and by the Australian Government Department of the Environment under the Environment Protection and Biodiversity Conservation Act 1999 and its subordinate legislation. This will be replaced by the Biosecurity Act 2015 from June 2016.

Off-shore, border and on-shore activities⁸⁴

Underpinning the overall policy and governance approaches are a number of key strategic priorities and objectives. These include off-shore, border and on-shore activities. Australia invests heavily in off-shore activities at the bilateral, regional and multilateral levels. The objectives are to assist in the elaboration of standards and conditions to minimise the spread of disease, assist countries in the management of disease, and gain an improved understanding of the nature of emerging and other diseases in order to support Australia's biosecurity.

Australia is a member of, and active participant in, organisations such as the OIE, FAO, the World Health Organization (WHO), the World Trade Organization (WTO), and the Asia-Pacific Economic Cooperation (APEC) forum. Activities in the region include the Department of Foreign Affairs and Trade (DFAT)-funded Southeast Asia Foot and Mouth Disease Campaign and the newly established OIE/DFAT Trust Fund which is extending support for capacity-building and the establishment of effective veterinary services. Off-shore activities also include the assessment of risk against Australia's appropriate level of protection for imports entering or likely to enter the country. However off-shore animal biosecurity programs in South East Asia (for capacity building and risk assessment offshore) has had its funding cut by 40% in 2016. For Africa it has been cut completely given a policy to focus development assistance within the region.

Import risk analyses are conducted by Biosecurity Australia (see II-3 for more details).

Border quarantine activities take place at sea ports and airports, and at quarantine stations managed by the DAWR).

Border quarantine work involves inspection of passengers and goods to ensure they do not

⁸³ 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.

⁸⁴ E. 07.23

pose a biosecurity risk. Profiling is carried to improve sources of risk and spotters used in the airports to check possible risk targets; identified passengers are then subjected to a more vigorous control with the extensive use of sniffer dogs which are widely used throughout the main airports in Australia (e.g. 12 in Melbourne, 19 in Sydney, 9 in Brisbane). The dogs are trained by Customs and receive 45 minutes training per day. They are extremely effective. Checks are also carried out at the 4 International mail centres with sniffer dogs and scanning detection machines. See:

http://www.anao.gov.au/Publications/Audit-Reports/2013-2014/Screening-of-International-Mail/Audit-summary#H2_Conclusion

Between 1 July 2014 and 30 June 2015 there were import applications for 5719 dogs and cats; 248 other live animals (horses, camelids, fish, fertile eggs, birds, etc), 182 for reproductive material; 950 for Biological material for animal or environmental end use; 4461 for Biological material for human consumption or laboratory end use; giving a total number of **11560** applications.

DAWR works closely with customs, police and security officers regarding illicit traffic and bioterrorist threats. DAWR also works closely with Interpol and other anti-fraud bodies e.g. OLAF (the EU anti-fraud office).

Where deemed necessary, DAWR also undertakes offshore (pre-border) work (e.g. inspecting overseas premises for compliance with Australian quarantine requirements). The countries to its immediate north are a particular focus of offshore work for Australia. A memorandum of understanding between Australia, Indonesia and Papua New Guinea in 1979 established a tripartite committee on animal health and quarantine that led to regular meetings and joint disease surveys of border areas between the three countries; the agreement was subsequently extended to include Timor-Leste. This initiative was followed by the innovative **Northern Australia Quarantine Strategy (NAQS)**, which was introduced in 1989 following a report on aerial littoral surveillance in 1987. NAQS provides a quarantine defence and helps to monitor threats in the vast, sparsely populated areas of northern Australia. It brings together the skills of local people, scientists and communications experts to develop and implement programs to identify, report and respond rapidly to disease incidents. NAQS also supports cooperative work with animal and plant health authorities in Indonesia, Papua New Guinea, and Timor-Leste in the areas of surveillance, laboratory diagnostics, training and emergency management.

Post Entry Quarantine facility⁸⁵

A new **Post Entry Quarantine (PEQ)** facility has very recently been opened on a Commonwealth owned site in Mickleham, Victoria. The new PEQ facility will consolidate all of the department's current PEQ operations into a single site in two phases. The **Mickleham PEQ** phase 1 facility will be available for first intakes for:

- bees from 19 October
- cats (240) and dogs (400) from 23 November for 10 days quarantine
- horses (80) from 30 November 14 days quarantine all in all out in 2 separate units
- plants from 1 December 2015.

Some horses e.g. racehorses, which need a race course for exercise purposes, will still be quarantined elsewhere.

Construction of phase 2 of the facility will be completed by 2018 firstly for birds and then for camelids. The existing department-operated PEQ facilities leases will expire between the end of 2015 and the end of 2018, with no opportunity for extension. From this period onwards, all imported animals including bees and plants will have to complete post entry quarantine at the new facility in Mickleham, Victoria.

⁸⁵ <http://www.agriculture.gov.au/import/future-post-entry-quarantine-arrangements>

On 1 July 2015, the functions of the Department of Immigration and Border Protection and the Australian Customs and Border Protection Service were integrated into a new Department, the Australian Border Force (ABF)⁸⁶. DAWR is continuing to work closely with ABF to harmonise approaches and ensure biosecurity risks at the border are closely and efficiently integrated with ABF's own border services and enforcement functions.

The Interim-Inspector-General of Biosecurity (IIGB) primary role is to enhance the integrity of Australia's biosecurity systems through the independent evaluation and verification of the performance of these programs across the "biosecurity continuum" – pre-border, border and post-border see: www.igb.gov.au

The States and Territories organise their own domestic controls and have slightly different requirements. A lot of the differences are due to plant diseases but some e.g. WA are free of BJD so have restrictions on import of live animals. In this State there are 4 state border crossing points. In Tasmania the additional restrictions relate to aquaculture and plants.

For more information on Inspection of imported food, see:

http://www.anao.gov.au/Publications/Audit-Reports/2014-2015/Administration-of-the-Imported-Food-Inspection-Scheme/Audit-summary#H2_Conclusion

⁸⁶ <http://www.border.gov.au/australian-border-force-abf>

II-5 Epidemiological surveillance and early detection <i>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.</i> 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): Appendix 1

Evidence (listed in Appendix 5): E. 07.2, E.07.22, 2PP.2, 2PP.9, 2MM.30, 2MM.31.

Findings:

Government veterinarians and veterinary para-professionals in the field play a significant role in passive surveillance through each of; producer awareness activity, training of private veterinarians, saleyard, abattoir and farm inspections and audits, the conduct of disease investigations and sampling, and disease reporting up the chain. A nationally notifiable disease list is included in all jurisdictional legislation and legally requires reporting on disease suspicion. National passive surveillance data is collated by AHA via the National Animal Health Information System and reported publicly in Australia's Animal Health Surveillance Quarterly publication. **NAHIS** provides timely and accurate summary information on Australia's animal health status to support trade in animal commodities and meet Australia's international reporting obligations. It also provides information on Australia's capabilities and activities with regard to animal disease surveillance and control.

http://nahis.animalhealthaustralia.com.au/public.php?page=pub_home&program=1

A National Surveillance Business Plan has been developed to coordinate Australia's national surveillance efforts including inputs from all governments and industries.

The **National Agreed List of Notifiable Animal Diseases** forms the minimum notifiable diseases list for each jurisdiction. The national list is currently being reviewed by the national Animal Health Committee.

Private veterinarians are also engaged in passive surveillance. National programmes that involve private veterinarians in the national animal health system/surveillance are the Australian Veterinary Practitioner Surveillance Network and the National Significant Disease Investigation Program.

The usual passive surveillance at all slaughterhouses is carried out via ante and post mortem inspection and results are fed back into the system. In addition suspect notifiable disease cases are thoroughly investigated. Last year in Australia there were about 1,272 reports of investigation into possible notifiable diseases (including EADs). Private practitioners in all jurisdictions play a key role in this.

Knackers yards are also included in the surveillance systems and at the one visited VS staff carried out regular PMs (about 40 per month) and in addition veterinary students from Melbourne were also involved in PM activities.

The team noted that one of the most important tools to engage private veterinarians was the National Significant Disease Investigation program, which encourages private veterinary practitioners to investigate and report unusual disease events by subsidising the investigation and laboratory costs. The program plays an important role in maximising private veterinary and farmer participation. The Australian Government provides some funding and the remainder is from the jurisdictions. In some jurisdictions there appears to be a lack of funding and some stated that its effectiveness has been undermined by a decline in its coverage, uptake, as well as by the time consuming nature of the investigation and claims process.

For more information see surveillance in the states and territories by private veterinarians (see p.50 E.07.2).

The National Sheep Health Monitoring Project (NSHMP) commenced in 2007 and monitors lines of adult sheep in abattoirs for a number of important animal health conditions. In the 2013–14 financial year 3,082,347 sheep, excluding lambs, were monitored across 18 domestic and export abattoirs; some of these abattoirs were monitored part-time. The NSHMP currently only reports significant endemic diseases that can be identified by inspecting viscera or at the adjoining carcass-inspection stage. Lines of adult sheep are monitored by qualified meat inspectors and/or company-based personnel.

Wildlife health surveillance

Wildlife Health Australia (WHA) administers Australia's general wildlife health surveillance system. Key elements of the system include a network of WHA coordinators, appointed by chief veterinary officers; coordinators at zoo and 'sentinel clinic' wildlife hospitals; and a web-enabled national database of wildlife health surveillance information (eWHIS). Wildlife health surveillance focuses on six disease categories: diseases listed by the OIE, bat viral diseases, mass or unusual mortality events, Salmonella cases, arbovirus infections, and diseases that wildlife coordinators consider unusual or interesting. Non-government wildlife disease investigators can also access subsidies via the National Significant Disease Investigation Program.

Strengths:

- The national significant disease investigation program.
- Enhancing passive surveillance at national level is a focus within the Australian Government's White Paper process.

II-5 Epidemiological surveillance and early detection	Levels of advancement
<i>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.</i>	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.
B. Active epidemiological surveillance	

Terrestrial Code reference(s): Appendix 1

Evidence (listed in Appendix 5): E.07.2, E.07.7, E.07.21, E.07.22, E. 01.2.3.1, 2PP.1, 2PP.2, 2PP.9, 2PP.11, 2H.10, 2H.11.

Findings:

There are a number of National Active Surveillance Programs which are constantly evaluated and updated as follows:

Cattle: National Arbovirus Monitoring Program (NAMP); TSE Freedom Assurance Program (Surveillance) and the Screw Worm Fly Freedom Assurance Program (SWFFAP).

Sheep: National Sheep Health Monitoring Project (NSHMP) – abattoir surveillance

Poultry: National Arbovirus Surveillance Program (NASP)

Honeybees: National Bee Pest Surveillance Program (NSPSP)

Wild Birds: National Avian Influenza in Wild Birds (NAIWB) surveillance program

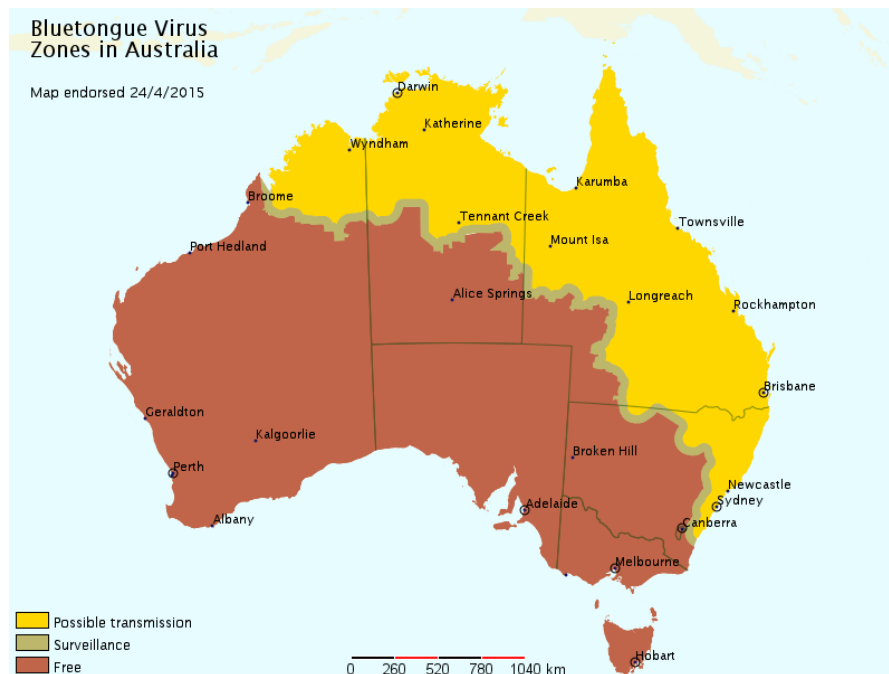
NAMP: monitors the distribution of economically important arboviruses (insect-borne viruses) of ruminant livestock and associated insect vectors in Australia. Arboviruses monitored by NAMP include bluetongue, Akabane and bovine ephemeral fever (BEF) viruses. Clinical bluetongue disease has not been observed in commercial livestock flocks and herds in Australia.

NAMP data are gathered throughout Australia by serological monitoring of cattle in sentinel herds, strategic serological surveys of cattle herds and trapping of insect vectors. In the case of sentinel herds in WA, QLD and NT in very remote locations local communities are paid to maintain the sentinel animals. Beatrice Hill in the Northern Territory is a government facility and a focus for exotic bluetongue virus (BTV) surveillance. Virus isolation is routinely undertaken on blood samples collected at this location. New genotypes and serotypes are detected on occasions.

Serotyping, virus isolation and molecular testing are applied strategically in herds in the Northern Territory, Queensland, Western Australia and New South Wales after seroconversions are detected. NAMP surveillance data relating to bluetongue early warning are supplemented by targeted surveillance activities conducted by the Northern Australia Quarantine Strategy of the Australian Government Department of Agriculture and Water Resources in remote coastal regions of northern Australia, including the Torres Strait.

See MAP 3 below for the zoning for BTV in Australia on 24 April 2015. Please note these zones do vary over time depending on the current situation and positive isolations.

Map 3: Bluetongue surveillance zones⁸⁷



The Northern Australia Quarantine Strategy (NAQS) led by DAWR monitors remote northern coastal areas and islands of Australia for biosecurity risks, including in animal health. It also involves collaboration with the Queensland, Northern Territory and Western Australian biosecurity agencies and other stakeholders.

Transmissible Spongiform Encephalopathies Freedom Assurance Program (TSEFAP):

In 2015, Australia continued to be recognised as a country of ‘negligible risk’ for bovine spongiform encephalopathy (BSE) and free from classical scrapie. Detailed information on TSEFAP surveillance results are routinely submitted to the OIE.

SWFFAP: Old World screw-worm fly (*Chrysomya bezziana*) is a serious threat facing Australia’s livestock industries. SWF surveillance uses a multifaceted approach, including adult fly trapping in the Torres Strait and at seaports, sample collection from myiasis cases in livestock and wildlife, and animal surveys. This approach increases the capacity for early detection of SWF incursions, which increases the probability of a successful eradication program. Nationally collated SWF surveillance data show that *C. bezziana* has not been detected through insect trapping and inspection of arriving international livestock vessels (data since 2003), insect trapping in Torres Strait (data since 2004) or myiasis investigations (data since 1997).

NAIWB Surveillance Program, is conducted Australia-wide. Surveillance for avian influenza in wild birds comprises two sampling components: a) targeted surveillance by sampling of apparently healthy, live and hunter-killed wild birds; and b) general surveillance by investigating significant unexplained morbidity and mortality events in wild birds, including captive and wild birds within zoo grounds (with a focus on exclusion testing for AI virus subtypes H5 and H7)

⁸⁷ http://namp.animalhealthaustralia.com.au/public.php?page=namp_map&raw=1&aha_program=2&recid=101

NBPSP is an early warning system to detect new incursions of pest bees and exotic bee pests, particularly varroa mites (*Varroa destructor* and *V. jacobsoni*), tropilaelaps mites (*Tropilaelaps clareae* and *T. mercedesae*) and tracheal mite (*Acarapis woodi*).

In addition Australian Government funded projects in some neighbouring countries to Australia's north comprise surveillance activities or the improvement of national surveillance systems:

1. Stop Transboundary Animal Diseases and Zoonoses program (STANDZ), which includes the South East Asia and China Foot-and-Mouth Disease Campaign (SEACFMD) – South East Asia
2. Australia-Indonesia Partnership for Emerging Infectious Disease – Indonesia
3. Annual Joint animal health surveys – PNG and Timor-Leste
4. Village Poultry Health and Biosecurity – Timor-Leste
5. Managing the risk of a rabies incursion in PNG and Northern Australia.

However there have been funding cuts for 2016 to the budget for this international work.

In peacetime collating all Australian surveillance data (passive and active) is the National Animal Health Information System (NAHIS), which is reported through AHA's regular publication of the national Animal Health Surveillance Quarterly.

In addition it was noted that there is a Data Warehouse Project and several projects (or proposed projects) plan to make use of the hardware facilities of the Enterprise Data Warehouse facility. One is the planned Enterprise Surveillance Solution which is a software development project combining a commercially available laboratory information management system with an in-house developed surveillance information system. This system will provide a capacity for in-house groups that are primary collectors of surveillance data to plan, resource, carry-out and record the results of surveys. It is planned the final version will be deployed before the end of June 2016. The system will later be adapted to suit the off-shore surveillance groups, Wildlife Health Australia and other potential users.

II-6 Emergency response	Levels of advancement
<i>The authority and capability of the VS to respond rapidly to a sanitary emergency (such as a significant disease outbreak or food safety emergency).</i>	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): Appendix 1

Evidence (listed in Appendix 5): E.01, 2,E.01.2.8, E.07.2, E.07.22, E.07.25, 2H.4, 2PP.1, 2PP.2, 2PP.4, 2MM.25, 2MM.27, 2H.4, 2MM.39.

Findings:

Emergency Animal Disease (EAD) responses are planned and implemented at three levels – national, state or territory, and local – and involve animal health authorities, emergency management agencies and industry organisations. In the event of an emergency animal disease (EAD) incursion, government officers, livestock producers, private veterinary practitioners and emergency workers would be called upon to help eradicate or control the disease.

The most significant review specifically into Veterinary Services and emergency response conducted at national level in the last few years was the **2011 Mathew's Review** into Australia's national FMD preparedness:

<http://www.agriculture.gov.au/SiteCollectionDocuments/animal-plant/pests-diseases/animal-pests-diseases/footandmouth.pdf>

A major Australian Government program was developed and implemented during 2011-13 in response to the 11 recommendations that resulted in improvements in many areas including FMD vaccination policy, carcass disposal, engagement with private veterinarians, laboratory capacity, swill feeding legislation and FMD training and awareness.

The Emergency Animal Disease Response Agreement (EADRA)⁸⁸ is a legally binding agreement between the Australian Government, state and territory governments, livestock industries (currently 14 industries) and AHA. It supports a rapid and efficient response to an EAD outbreak. The agreement, which is a world first, establishes basic operating principles and guidelines, and defines roles and responsibilities of the parties that are involved. It provides for formal consultation and dispute resolution between government and industry on resource allocation, funding, training, risk management and ongoing biosecurity arrangements.

The Australian Veterinary Emergency Plan (AUSVETPLAN) is a comprehensive series of manuals that sets out the technical and operational policy and guidelines for agencies and organisations involved in a response to an EAD outbreak. AHA works in consultation with its

⁸⁸ E.07.2 p. 73

government and industry members to prepare and review the AUSVETPLAN manuals and supporting documents. AHA does not determine animal health policy; it facilitates the development of national policy through engagement with the relevant stakeholders.

All veterinary practitioners must be able to recognise the possibility of an EAD and be familiar with the procedures to initiate an immediate response. To maintain this awareness, state and territory authorities conduct awareness programs on notifiable and exotic livestock diseases for **private veterinarians**, particularly those involved in livestock industries.

The AVA was involved in the development of national standards for the employment of private veterinarians in an emergency animal disease outbreak. These national standards were coordinated by the Australian Government and have been agreed by all states and territories. Part of this project was for the AVA to work with Guild Insurance, a private company, to finalise **insurance packages for private veterinarians** engaged as independent contractors in an EAD response. These packages were announced in May 2014⁸⁹.

Emergency Animal Disease Preparedness and Response

When EAD outbreaks occur, preparedness to manage and respond to them ensures that Australia can mount a rapid and effective response with minimal disruption to livestock (including horse) industries and food industries. Development of Australia's EAD preparedness is coordinated through the relevant activities of inter-governmental and government-industry forums such as AHC, CCEAD and AHA. The main objective is to ensure that Australia is well prepared for EAD incidents through a range of activities, including public awareness, training, planning, simulation exercises and surveillance.

Rapid Response Team (RRT)⁹⁰

The Rapid Response Team concept was developed and trialled in 2003/04, and during this time the RRT was identified as a significant incident response asset that could be used in all states and territories, should the need arise.

The RRT is a team of about 50 government personnel from around Australia, with skill and expertise in emergency animal disease response roles. RRT members are equipped to fill key management positions in control centres during a response, and they can be deployed as individuals, small teams, or a large team in the event of an EAD response in one or more jurisdictions.

Animal Health Australia has responsibility for the management of the RRT, except during EAD response activities, during which the RRT members are deployed by the Department of Agriculture and Water Resources.

RRT members are employees of government primary industry/agriculture departments and are nominated by their Chief Veterinary Officer. Members will generally remain on the RRT for 3-5 years, after which they will be replaced by new members. RRT members are sponsored to participate in annual professional development activities and regular simulation exercises. Maintaining the vibrancy of the RRT is an important consideration and Animal Health Australia seeks nominations from the jurisdictions of new personnel on an annual basis.

Vaccine bank

The FMD Vaccine Bank which is held at Merial's facility at Pirbright in the UK consists of sufficient quantities of antigens of nine strains of FMD for the manufacture of vaccines to enable Australia to respond to an outbreak of FMD. The quantities and strains of antigens held in Australia's vaccine bank have been determined by a risk analysis process that considered the incursion and outbreak scenarios that might affect Australia.

⁸⁹ <http://www.ava.com.au/gap>

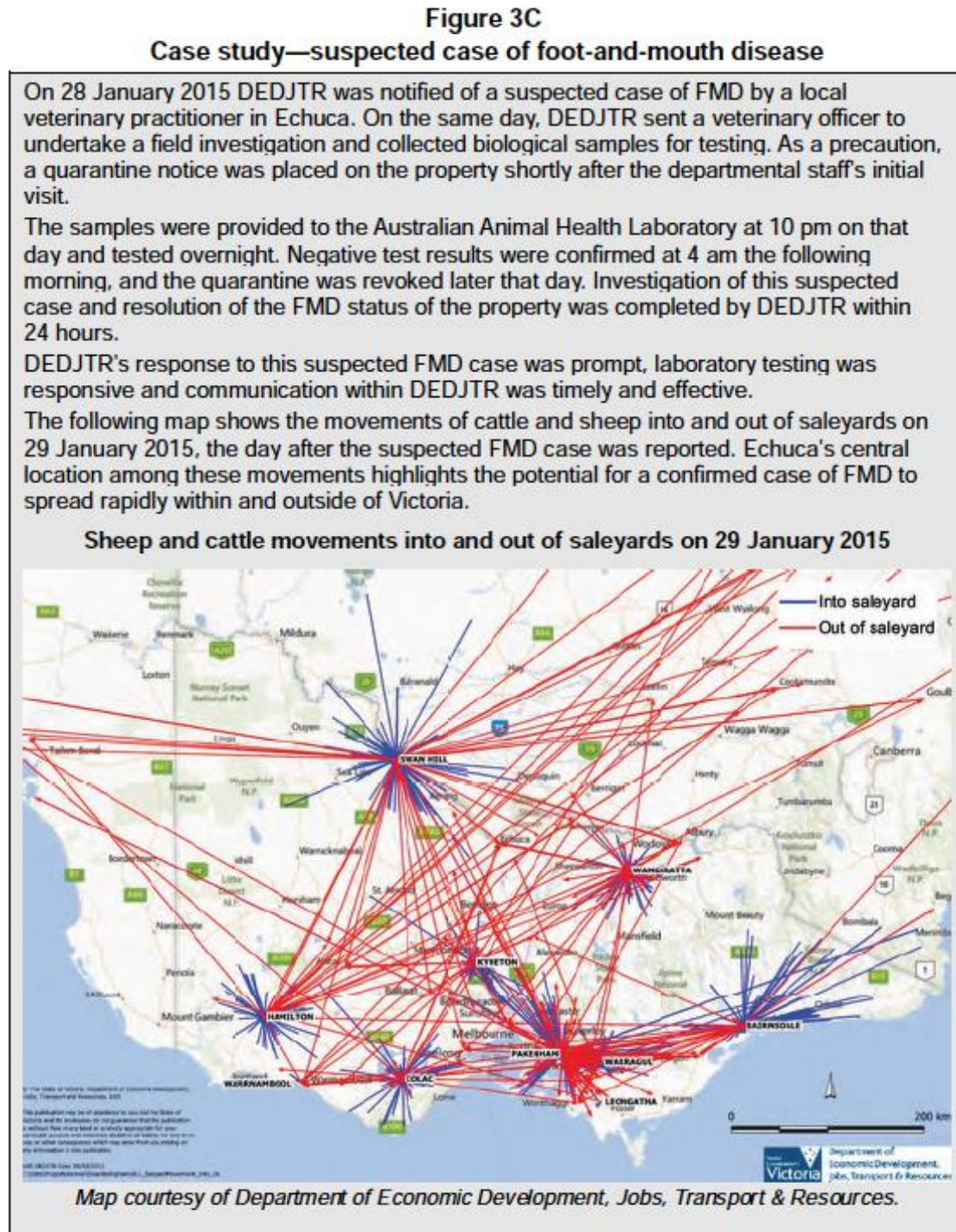
⁹⁰ <http://www.animalhealthaustralia.com.au/training-centre/rapid-response-team-rrt/>

Additional completed or on-going emergency response activities include, but are not limited to:

- *Exercise Odysseus*: A program of more than 40 activities involving over 1600 people conducted in 2014–15 by the Australian Government, state and territory governments, and livestock and allied industries. The program assessed aspects of Australia's preparedness to implement a national livestock standstill in response to an outbreak of foot-and-mouth disease (FMD);
- State response plans such as for Hendra virus and for avian influenza, to complement the AUSVETPLAN response policy brief and disease strategy, respectively;
- Desk-top simulation exercises;
- Field emergency response exercises, including in areas with out-of-range mobile phone communication;
- Live-mapping capability e.g. surveillance of animal disease, property and owner listing and restricted/control zones. Unlimited simulation capability of outbreak occurrence, response and forecasting related to surrounding animal populations at risk;
- Emergency Animal Disease Management – MoU with State Emergency institutions such as police, highway patrol etc.;
- AAHL (Geelong, Victoria) and certain laboratories at jurisdictional level have emergency response plans in place to immediately upscale the laboratory testing capacity following a disease outbreak;
- The Australian CVO is empowered to authorize the use of non-registered vaccines in cases of emergency disease outbreaks; and
- The Australian wool industry has drawn up its own Emergency Animal Disease Preparedness Strategy 2013-2016.

FIGURE 6: Scenario modelling – suspected FMD outbreak⁹¹

The following figure illustrates the quality of scenario modelling and the difficulties in tracing livestock movements:



Source: Victorian Auditor-General's Office.

⁹¹ E.07.22

Strengths:

- Excellent preparedness, through high-level emergency management committees meeting at regular intervals to undertake “stock stand-still” and disease response simulations.
- In emergency situations, a strong chain of command is achieved by using a well-defined incident command structure at Commonwealth and jurisdictional levels - this overcomes the complexity of the federal governance structure of Australia and permits staff to be readily transferred across jurisdictions.

Weaknesses:

- Currently mapping systems between States may not be fully compatible.
- Present staff numbers may limit rapid and sustained response to sanitary emergencies.
- The Team was informed that although private veterinarians are perceived to being a vital link in biosecurity and emergency response plans, their participation in emergency response, although laid down on paper, is not enforceable and is often lacking, thereby creating reduced capacity in the surveillance and response system.
- In some jurisdictions the decline in financial and staff resourcing for core biosecurity functions has weakened their capacity to effectively detect, prepare for and respond to an emergency livestock disease outbreak.

Recommendations:

- Ensure inter-operability of jurisdictional mapping and data systems for emergency response.
- There should be an in depth evaluation of staffing levels at jurisdictional level for rapid response.
- Finalise development and implement a national emergency data management system or interface (e.g. working with Victoria’s emergency management software “MAX” and other systems as required) to allow the information from jurisdictions to be collected, collated and nationally reported, as per the Commonwealth and jurisdictions’ commitment under the Intergovernmental Agreement on Biosecurity (IGAB). This Data Warehouse would allow the receipt of information in a consistent form with jurisdictions during an emergency animal disease event for national reporting purposes.

II-7 Disease prevention, control and eradication	Levels of advancement
<i>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.</i>	1. The VS have no authority or capability to prevent, control or eradicate animal diseases.
	2. The VS implement prevention, control or 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): Appendix 1

Evidence (listed in Appendix 5): E.01.2, E.01.2.2.2, E.01.2.3.1, E.01.2.4, E.07.22, 2PP.1, 2MM.29, 2MM.32, 2MM.33, 2MM.34, 2MM.36, 2PP.4.

Findings:

Animal diseases eradicated nationally or from defined sub-national zones in the last ten years: Equine influenza 2007

Highly pathogenic avian influenza

- 2012 (H7N7)
- 2013 (H7N2)

Animal diseases of which the prevalence has been controlled to a low level in the last ten years:

Low pathogenicity notifiable avian influenza – occasionally detected in domestic poultry: last reported 2013;

Pigeon paramyxovirus was first reported in Australia in 2011 and is now considered endemic in several states;

Theileriosis (Ikeda strain) has spread to new areas of Australia during the past 10 years after initially being confined to NSW;

Rabbit calicivirus – two new strains not previously reported were detected in domestic rabbits in Sydney (and subsequently other parts of NSW) and in the Canberra region;

Hendra virus infection in horses There have been a number of horses reported with Hendra virus over the past 10 years;

Australian bat lyssa virus – isolated cases ongoing;

Arboviral diseases in horses, including Kunjin virus;

Influenza A in pigs;

Bluetongue virus – serotypes 2 and 7 were detected for the first time in healthy sentinel cattle in the Northern Territory in 2008; and

Minor changes to distribution of bee pests and diseases in last 10 years.

Anthrax vaccine bank: The national anthrax vaccine bank was established in 2009 for the purposes of guaranteeing the supply of imported anthrax vaccine to meet Australia's particular vaccine registration requirements for a medium to large anthrax outbreak. While the bank has not yet been deployed in an emergency response, it is an important trade assurance mechanism for the red meat industries. Animal Health Australia manages the contract with the supply company (Virbac Australia) for the storage, supply and delivery of the anthrax vaccine.

The Commonwealth and jurisdictions implement prevention, control or eradication programs for all Australia's relevant diseases, with scientific evaluation of their efficacy and efficiency. Most of these programs are nationally applied. Some examples of such programs are:

1. Caprine Arthritis Encephalitis (CAE) Accreditation Scheme (QLD example)⁹²

As in other states, a voluntary CAE accreditation scheme is administered by Biosecurity Queensland (BQ). BQ assesses the activities performed by registered private veterinary practitioners under the CAE Accreditation Scheme. This involves the practitioners completing an assessment and having an understanding of the requirements of this program. Testing for the CAE Accreditation Scheme is carried out at Biosecurity Sciences Laboratory, QLD (a NATA accredited Australian Veterinary laboratory). The private veterinarians collect the samples for testing and manage the herd health on goat properties. There are currently 102 enrolled flocks in QLD.

Responsibility for meeting the conditions of the scheme rests with the owner of the flock and a private veterinary practitioner. Owners are required to meet all veterinary and laboratory costs and to pay an accreditation fee to Biosecurity Queensland. NSW DPI has a similar CAE accreditation scheme in place.

2. Ovine Brucellosis Accreditation Scheme⁹³

Brucella ovis infection causes disease and infertility in sheep. The prevalence of infection can be high if the disease is not controlled. Merinos show a lower incidence of disease compared to British breeds and crossbreds. Brucellosis of sheep has been reported in most major sheep-producing regions of the world and is present in Australia.

Queensland: A voluntary scheme has been administered by BQ on behalf of the QLD sheep industry. In December 2014, 79 flocks were accredited. Although a number of new flocks were accredited throughout 2014, severe drought conditions and dispersal of some flocks are likely to have contributed to a number of flocks also exiting the scheme.

South Australia: A voluntary ovine brucellosis accreditation scheme operates in South Australia. Currently, 413 producers and 522 flocks are accredited. South Australia has a low incidence of ovine brucellosis, which continued in 2014.

Tasmania: The Tasmanian Department of Primary Industries, Parks, Water and Environment – in conjunction with veterinary practitioners and industry – has developed a voluntary ovine brucellosis accreditation scheme to control the disease in Tasmanian flocks. Accredited private veterinary practitioners test the flocks, and the department maintains the records. Tasmania has about 80 accredited ovine brucellosis-free flocks at any one time. Ovine brucellosis has not been confirmed in any sheep in Tasmania since 1988.

Victoria: Ovine brucellosis is present at low levels in Victorian sheep flocks. During 2014, infection was detected in eight flocks. A voluntary ovine brucellosis accreditation scheme, which is administered by DEDJTR, provides assurance that rams are free from ovine brucellosis. This assurance is required for sales, interstate movement, overseas export and attendance at shows. The scheme is based on property risk assessment, regular testing, adherence to best-practice flock management and investigation of suspect cases. Both departmental staff and private veterinary practitioners are involved in implementing the program across Victoria. As of December 2014, 496 flocks were accredited in Victoria as free from ovine brucellosis.

Western Australia: A voluntary ovine brucellosis accreditation scheme is available to ram breeders in Western Australia. As of December 2014, the scheme had 195 accredited flocks.

New South Wales: An ovine-brucellosis scheme is implemented. Detail at:

<http://www.dpi.nsw.gov.au/agriculture/livestock/sheep/health/ovine-brucellosis-scheme>

⁹² E.01.2.4

⁹³ E.07.2

3. Hendra virus (HeV) Program

Hendra virus was first described in 1994 in Australia when it caused disease and death in horses and close-contact humans. While the incidence of disease is low, the case fatality rate is high, with around 80% of equine cases and 60% of human cases having a fatal outcome. Transmission of HeV from flying foxes (natural hosts) to horses is believed to follow oro-nasal contact with the body fluids of infected flying-foxes, plausibly while grazing. All human cases are attributed to direct contact with the body fluids of infected horses. HeV is a nationally notifiable disease with previous cases in QLD and NSW. Strategies for managing exposure risk in horses focus on minimising potential equine contact with flying-fox body fluids; strategies for managing human exposure risk focus on avoiding direct and unprotected contact with sick horses. There is also an Equivac HeV vaccine recently developed by Australian researchers (AAHL) that can protect at-risk horses and minimise human exposure risk. BQ has been working closely with the Queensland Health and Workplace Health and Safety Queensland with managing all cases that potentially involve human risks. BQ has developed guidelines and information for veterinarians and horse owners to minimise the risk of infection and provide Hendra virus exclusion testing free of charge. Please refer to the DAF website <https://www.daf.qld.gov.au/animal-industries/animal-health-and-diseases/a-z-list/hendra-virus> for further information. NSW and other jurisdictions have similarly worked closely with their respective Health Authorities on Hendra preparedness.

4. Australian Bat Lyssavirus (ABLV) Program

ABLV is an endemic disease in bats and is closely related to the classical rabies virus seen overseas. ABLV is nationally notifiable and QLD, NSW and NT have published response guidelines. Jurisdictions work closely with their Health Authority counterparts in managing all cases that potentially involve human health risks. Other partners include Wildlife Health Australia, and wildlife/bat carers, private veterinarians and Australian Veterinary Association.. Any bats from a human/bat or animal/bat interactions are strongly recommended to get tested. If the bat is not available for testing, then a post exposure course of rabies vaccine and immunoglobulin is recommended. All human cases are referred to Health Authorities, and the Veterinary Authority advises veterinarians in private practice on management of bat/animal interactions. Guidelines have been developed including information for veterinarians and pet owners to minimise the risk of infection. For example, please refer to DAF (QLD) website <https://www.daf.qld.gov.au/animal-industries/animal-health-and-diseases/a-z-list/australian-bat-lyssavirus/australian-bat-lyssavirus> for further information.

5. The Tick Fever Centre (TFC)

Located at Wacol, QLD, the TFC exists to produce tick fever vaccines to assist cattle producers to mitigate against losses associated with Tick Fever (**Babesiosis and Anaplasmosis**).

The centre is the only producer of tick fever vaccines in Australia, and this activity is performed by government due to market failure. The Tick Fever Centre has a team of highly skilled and experienced staff, Good Manufacturing Practice (GMP) accredited facilities (upgraded to meet new standards in 1999) and quality control production and distribution systems.

Demand for vaccine varies with seasonal conditions and cattle movements, but is generally between 600,000 and 800,000 doses per year, with 95% of it used in Queensland.

Aside from QLD, NSW is currently implementing a \$4 million a year tick eradication program and the NT and WA are also heavily involved in tick programs including zoning and inspections.

6. National Johne's Disease Control Program (NJDCP):

Animal Health Australia co-ordinates special programs funded by industry to manage Johne's Disease. The NJDCP aims to assist the livestock industries reduce the spread and impact of Johne's disease in Australia. It is a cooperative program involving Australian livestock industries, government and the veterinary profession. Animal Health Australia manages the program on behalf of these key stakeholders. In view of the difficulties encountered in effectively controlling BJD due to the absence of reliable diagnostic methods, this program is currently under review. This review process involves a series of public consultations coordinated by AHA.

7. Other jurisdictional animal disease control activities include:

- Legislated control programs for cattle tick and acaricide resistant tick strains;
- Virulent foot rot control program funded by the sheep and goat industry.

In addition there are AI centres and ET teams throughout Australia and some are approved for export. The one visited by the team was approved to export to the EU and was operating to a high standard with very good biosecurity. It has developed its own emergency response plan in the event of a breakdown of its high animal disease status. It provides (by a separate company on the same site) a semen sexing operation which is about 90-95% efficient in determination of sex.

Also to be noted is information in respect of on-farm biosecurity for farmers at:

<http://www.farmbiosecurity.com.au/>

Strengths:

- Well-structured and executed, prevention and control programs for all relevant animal diseases, based on strong public-private partnerships, technical expertise, commitment and engagement.

II-8 Food safety A. Regulation, authorisation and inspection of establishments for production, processing and distribution of food of animal origin <i>The authority and capability of the VS to establish and enforce sanitary standards for establishments that produce, process and distribute food of animal origin</i>	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): Appendix 1

Evidence (listed in Appendix 5): E.01.2, E.01.2.2.2, E. 01.2.3.1, E.01.2.4, PP.03, 2M.3, 2M.19, 2M.19.

Findings:

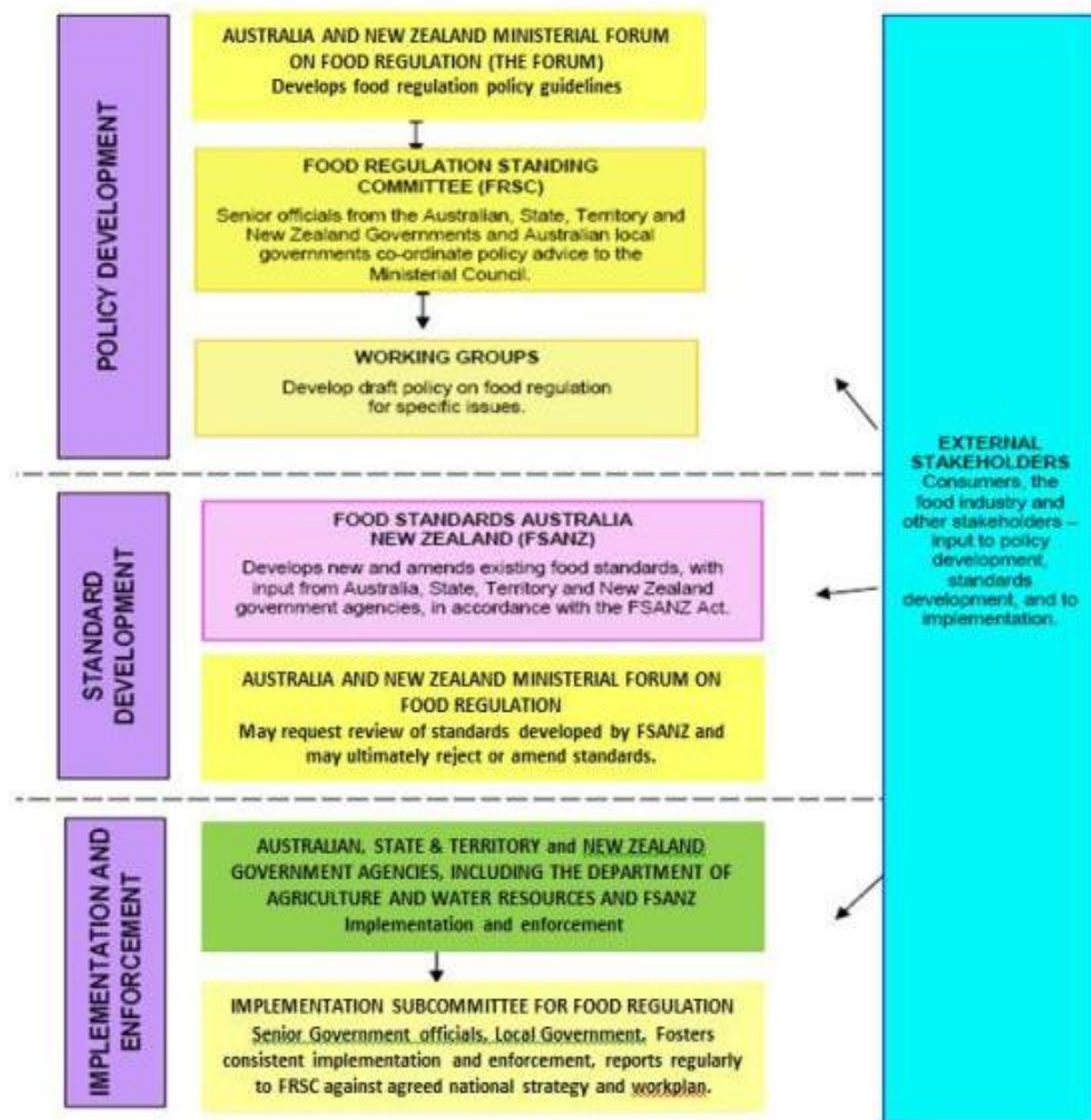
Note. The team interpreted that on-farm establishments, exclude "home slaughter" such as of individual livestock farms by farmers for strictly home/personal use.

Australia's food regulation system is a cooperative bi-national arrangement involving Australia and New Zealand. In Australia, responsibility for the food regulatory system occurs at all levels: Commonwealth, state & territory and local governments. Under the food regulatory system, food policy decision making is separated from the development of food regulatory measures.

1. The Food Regulation Agreement (FRA)⁹⁴

- gives effect to a commitment by Commonwealth, State and Territory governments to a national approach to food regulation within Australia;
- was signed by the Council of Australian Governments (COAG) in November 2000;
- aims to provide a national system of safe food controls to;
 - protect public health and safety;
 - reduce the regulatory burden on the food sector;
 - facilitate harmonisation of Australian domestic and export standards with international standards;
 - provide cost effective compliance and enforcement arrangements; and
 - provide a consistent regulatory approach.

⁹⁴ PP.03

FIGURE 7: Governance - Food Regulation in Australia

2. **OzFoodNet** forms part of the Department of Health's role in foodborne incidence, illness and surveillance⁹⁵

The objectives of OzFoodNet, Australia's enhanced foodborne disease network, are:

- Estimate the incidence and cost of foodborne illness in Australia;
- Investigate the epidemiology of foodborne diseases, by enhancing surveillance and conducting special studies on foodborne pathogens;
- Collaborate nationally to coordinate investigations into foodborne disease outbreaks, particularly those that cross state, territory and country borders;
- Identify foods and commodities that cause human illness and provide information to food safety agencies for risk assessment; and
- Train people to investigate foodborne illness.

⁹⁵ PP.03

There is an OzFoodNet member (epidemiologist) in each jurisdictional Health Authority. An OzFoodNet Central team provides national coordination from the Australian Government Department of Health. OzFoodNet is represented on the Communicable Diseases Network of Australia.

Additional OzFoodNet members include representatives from: the Public Health Laboratory Network; Department of Agriculture & Water Resources; Food Standards Australia New Zealand and the National Centre for Epidemiology and Population Health.

3. The Australian Standard for the Hygienic Production and Transportation of Meat and Meat Products for Human Consumption (the Australian Standard) and Food Standards Australia New Zealand (FSANZ)

All meat produced in Australia whether for export or domestic use must meet the requirements of the **Australian Standard**.

Food Standards Australia New Zealand (FSANZ) is a bi-national government agency, whose main responsibility is to develop and administer the Australia New Zealand Food Standards Code (the Code), which lists requirements for foods such as product standards, processing hygiene, labelling and primary production requirements. The Food Safety Standards in the Code place obligations on Australian food businesses to produce food that is safe and suitable to eat. There are also health and hygiene obligations for food handlers. A food business is any business or activity that involves the handling of any type of food for sale, or the sale of food in Australia. Each state and territory has its own laws to implement and enforce the food standards developed by FSANZ. In most states, local governments are involved in the monitoring and enforcement of food standards.

In all states and territories of Australia, state and territory governments are responsible for regulatory oversight, including auditing/inspection of food establishments processing, handling and retailing of food for the Australian market. This ensures compliance with relevant provisions of the Code, including product standards, processing hygiene and primary production requirements. Comprehensive and detailed legislation and regulatory standards for food safety are in place in all jurisdictions providing coverage over the entire food supply chain – from paddock to plate.

Jurisdictional abattoirs, without regard to their intended market, are required to operate comprehensive Food Safety Programs. Abattoirs are required to comply with the requirements listed in the Australian Standard for the Hygienic Production and Transportation of Meat and Meat products for Human Consumption (AS4696:2007) and the Australian Standard for Construction of Premises and Hygienic Production of Poultry Meat for Human Consumption (AS 4465:2005) which contain detailed requirements relating to the safe sourcing, slaughter and further processing of animals for human consumption.

The **Export Meat Program (EMP)** is responsible for developing operational policy for implementing audit and verification policy and for the regulation of the export meat sector. Production and processing of export eligible meat and meat products and wild game and wild game meat products is undertaken in accordance with the relevant Australian Standards and importing country requirements.

Each export registered establishment operates in accordance with an approved arrangement that is approved by an Area Technical Manager. The approved arrangement must ensure that meat/wild game is:

- Wholesome or identified for further processing for food;
- Meets the requirements for accurate trade description;
- Meets the importing country requirements; and
- Is traceable, can be recalled if required and its integrity is assured.

Underpinning the department's role in certification is the **Meat Establishment Verification System (MEVS)** and the **Export Meat Systems Audit Program (EMSAP)**. Together these programs perform verification and audit of each establishment's approved arrangement.

Auditing of export establishments is conducted by Australian Government DAWR authorised officers or approved auditors. The authorised officers may be employees of DAWR or the state or territory government. To minimise the duplication of regulatory auditing DAWR has entered into formal agreements with state and territory authorities so that auditing conducted by the other party is recognised as meeting requirements. Where state and territory authorities audit on behalf of the department an annual verification of compliance and effectiveness of these arrangements is conducted.

As at 13 May 2015⁹⁶ the following numbers of establishments were registered for export:

• Red meat (tier 2)	69
• Pork	7
• Game processing	5
• Poultry	30
• Independent boning rooms	16
• Further processing plants	63
• Casing plants	8
• Cold Stores	61
• Freight forwarders, container depots, terminals	59
• Red meat (Tier 1)	14

The numbers of slaughtered animals under veterinary control in **non-export plants** is recorded in the state and territory datasets as responsibility for inspection in these plants rests with them. **Home slaughter** such as on individual livestock farms by farmers is permitted in some jurisdictional legislation for strictly home or personal use. The numbers of home slaughtered animals are not known but numbers would be small.

For a complete list of abattoirs and boning establishments in Australia, see:

<http://www.ausmeat.com.au>

Strengths:

- Well legislated, executed, controlled and supervised food safety programs throughout the whole food-of-animal-origin production chain.
- Close relationship and cooperation in animal production food safety between DAWR (food safety areas) and the Department of Health at federal level, as well as between the respective agricultural, food safety departments and health departments at jurisdictional levels.

⁹⁶ E.01.2

<p>B. Ante and post mortem inspection at abattoirs and associated premises (e.g. meat boning/cutting establishments and rendering plants).</p> <p><i>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.</i></p>	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): Appendix 1

Evidence (listed in Appendix 5): E.01.2, E.01.2.2.2, E. 01.2.3.1, E.06.1, E.06.2, E.15.1, E.15.2, 2H.13.

Findings:

THE AUSTRALIAN EXPORT CERTIFICATION ARRANGEMENTS (under the control of DAWR)

In 2011 the **Australian Export Meat Inspection Service (AEMIS)**⁹⁷ was introduced in order to formalise health and hygiene arrangements and transition to full cost recovery for Australian Government provided food safety services.

AEMIS is an integrated set of controls specified and verified by Government that ensures the safety, suitability and integrity of Australian meat and meat products. Underpinning AEMIS are objective hygiene and performance standards which are continually monitored.

Under AEMIS, a government employed DAWR (on-plant) veterinarian is responsible for ante-mortem inspection and verification of post-mortem inspection and processor hygiene practices.

Post-mortem inspection is delivered either by DAWR officials called Food Safety Meat Assessors (FSMAs) or Australian Government Authorised Officers (AAOs). The latter are employed by the establishment or contracted by the establishment from a DAWR approved third party service provider, such as an independent AAO employer, to satisfy importing market requirements for Australian Government health certification. All meat inspectors on export registered red meat and pork establishments, whether FSMAs or AAOs, are under the direct supervision of the government veterinarian.

The 'Independent Employer of AAOs Accreditation Scheme' was developed by DAWR to provide for the employment of AAOs by third party employment providers. Under this Scheme, AAOs are engaged under a Deed of Obligation to DAWR and are legally bound to DAWR to perform inspections in accordance with a detailed set of DAWR controlled instructions. The Deed requires that AAOs comply with the Australian Public Service Values

⁹⁷ <http://www.meatinspectors.com.au/quality-assurance/industry-background>

and Code of Conduct. This Scheme was established a number of years ago to avoid any perception of conflict of interest by the EU in relation to the engagement of meat inspectors. To avoid the same perception for exports to the United States, an FSMA must be stationed at the end of the processing chain. Given the majority of Australian export establishments are both US and EU listed both arrangements run in situ on all of these plants, i.e. two additional, separate measures responding to two different country perspectives on this issue.

More specifically, for all export markets including the US and EU, the OIE PVS Team was advised by DAWR that AEMIS has incorporated the following controls to ensure the perception of conflict of interest is removed:

- All meat inspectors have the same prerequisite qualifications notwithstanding how they are employed
- All meat inspectors, whether AAOs or FSMAs, are under the supervision of the on plant government veterinarian
- All meat inspectors are subject to ongoing daily verification of their competency in discharging their meat inspection responsibilities against national performance standards and the results are recorded in a national database
- Companies are required to enter into contracts with the department not to seek to influence meat inspectors
- All meat inspectors enter into contracts with the department to meet their professional statutory obligations
- Ongoing product verification exists throughout the on plant export system to measure a range of key performance characteristics, including microbiological and macroscopic indicators. This system is called the Product Hygiene Indicators program (PHI). PHI includes a range of company and DAWR generated performance indicators that are reviewed regularly.

The Australian Standard for the Hygienic Production and Transportation of Meat and Meat Products for Human Consumption (AS4696:2007) require that a suitably qualified meat safety inspector performs post-mortem inspection and make decisions on each carcass and its carcass parts (any tissue or structure removed from a carcass and includes head, viscera and blood).

On-Plant Veterinarian's (OPVs) perform their tasks in accordance with departmental work instructions. On appointment OPVs receive 6 months in-service training.

In addition, Murdoch University, WA, has successfully partnered with DAWR to pilot a 12 week vocational training program for selected final year veterinary students which ensures their readiness for employment as OPVs upon graduation. Other universities are joining this program.

There are veterinary Area Technical Managers federal veterinarians who audit the activities of the export establishments and regional Australian Government veterinarians who also carry out audits and manage the Area Technical Manager veterinarians.

DAWR operates a comprehensive regulatory system that can vary depending on the international markets accessed by the individual facility but the following points are common across all export red meat abattoirs:

- Facility must have a DAWR accredited veterinary officer at the facility to assess animal health prior to slaughter;
- Facility must have DAWR accredited meat safety inspectors at the facility to assess each animal after slaughter to ensure that the meat is fit for human consumption.

Under AEMIS⁹⁸ meat safety inspectors (AAOs and FSMAs) performing post-mortem duties must have a Certificate III in Meat Processing (Meat Safety) qualification issued within the past 5 years and attain a Certificate IV Meat Processing (Meat Safety) qualification within 12 months of appointment. The verification of post-mortem inspection against post-mortem inspection performance standards is conducted by a departmental veterinarian who may be assisted by a FSMA. Verification assesses both inspection procedures and inspected product in a defined, random sample of production.

An additional option exists for pig establishments, where an establishment may elect to utilise authorised officers called Porcine Ante-mortem Inspectors (PAMIs) for ante-mortem inspection, under the supervision of the DAWR veterinarian. Stockmen must have attained specified units of competency in ante-mortem inspection as part of the Certificate III in Meat Processing (General/Livestock handling/Meat Safety) qualification.

Establishments may choose to utilise employees of their company or a department approved service provider in a training capacity prior to becoming a non-departmental authorised officer.

The described controls embedded in AEMIS assure the efficacy of the export meat inspection system and address perceived conflicts of interest. This has been attested to through in-depth foreign reviews by Australia's major export markets on numerous occasions over the past several years.

THE AUSTRALIAN DOMESTIC PRODUCTION ARRANGEMENTS

Domestic market abattoirs are covered within individual state and territory Food Authority arrangements and staffing, given responsibility for audit and inspection rests with them. Production of meat for the domestic market must meet the requirements of the Australian standard. All audits of abattoirs supplying the domestic market are conducted by Approved Food Safety Officers. National coordination and consistency is provided by a Meat Regulation Implementation Working Group with representation from all relevant jurisdictional food safety authorities.

All **red meat abattoirs** in Australia are required to have **meat safety inspectors** during all operating periods to ensure that animals are inspected against the requirements outlined in AS4696:2007. Meat safety inspectors are required to complete a formal training course through a national accredited training organisation and complete both theory and practical assessments to demonstrate their ability to identify animal diseases and apply appropriate dispositions. When they have received their formal qualification, they must make formal representations to the Food Authority for assessment and approval as a registered meat safety inspector. A senior Food Authority officer, who holds the appropriate meat safety inspector and training and assessment qualifications, then conducts a formal assessment of the applicant. This assessment comprises a written examination and review of their practical skills. The successful completion of this assessment results in the inspector being issued with a certificate and approval number from the Food Authority which permits them to be the registered meat safety inspector at an abattoir.

The Food Authority continually assesses all meat safety inspectors during audits of abattoirs.

Inspectors are reviewed to ensure they are completing their duties in compliance with the Australian Standard requirements, from the ante-mortem inspection of animals in conjunction with veterinary officers, through to the final inspection and disposition of slaughtered animals.

⁹⁸ E.15.1

The Standards in the ***Australia New Zealand Food Standards Code*** are legislative instruments under the Legislative Instruments Act 2003. In Australia, compliance with the Code for all foods is monitored by authorities in the states and territories⁹⁹.

The Food Authorities operate a comprehensive Memorandum of Understanding (MOU) with the Commonwealth Department of Agriculture and Water Resources (DAWR) that places the regulatory responsibility of export red meat abattoirs within the control of DAWR.

Jurisdictional (State and Territory) Food Authorities are responsible for the regulatory oversight of poultry abattoirs (both domestic and export registered) and ensure these facilities comply with the legislative requirements outlined in AS 4465:2005. This Standard does not require on site veterinary officers or meat safety inspectors to be present during processing operations but does require the business to operate a comprehensive Food Safety Program and veterinary control system for all poultry sourced and processed for human consumption.

The Australian Government Department of Agriculture and Water Resources is responsible for the inspection and sampling of imported food.

Strengths:

- Australian Standard for the Hygienic Production and Transportation of meat and meat products for human consumption (AS 4696:2007);
- Inspection arrangements for export markets under AEMIS.
- Most of the meat entering the domestic market comes from export approved establishments.

Weaknesses:

- Ante- and post- mortem inspection by meat safety inspectors at abattoirs producing meat for the domestic market, although subject to random compliance audits by official veterinarians, are not seen to be working under direct veterinary supervision and direction. This situation may also compromise passive disease surveillance capability in the abattoirs producing only for the domestic market;
- The direct employment of meat inspectors by abattoirs producing for the domestic market, where employment safeguards may not be as strong as under AEMIS, may result in perceived conflicts of interest; and
- Australia Standard 4465:2005 for poultry abattoirs does not require on site veterinary officers or meat safety inspectors to be present during processing operations.

Recommendation:

- For Australian domestic production arrangements, investigate administrative measures to enable the Veterinary Authority, in accordance with the OIE Code, to provide guarantees of responsibility for an effective control of the sanitary status of animal products throughout the slaughter, processing, transport and storage periods. In particular, ensuring sufficient veterinary oversight and addressing potential conflict of interest with inspection arrangements in Australian domestic product arrangements or for slaughtering certain species and to ensure adequate surveillance for animal health purposes and the welfare of animals at slaughter should be investigated.

⁹⁹ <http://www.foodstandards.gov.au/Pages/default.aspx>

C. Inspection of collection, processing and distribution of products of animal origin	Levels of advancement
<i>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.</i>	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): Appendix 1

Evidence (listed in Appendix 5): E.01.2, E.01.2.2.2, E. 01.2.3.1, E.07.22, E.15.4, 2H.15, 2pp.10.

Findings:

Note: *The team interpreted that on-farm establishments, exclude home processing of products of animal origin on individual livestock farms by farmers for strictly home or personal use.*

Australia's food regulation system is a cooperative bi-national arrangement involving Australia and New Zealand.

Enforcement of the Food Standards Code is the responsibility of:

- State & territory food safety agencies;
- Commonwealth Department of Agriculture and Water in Australia (imported foods);

FIGURE 8: The Safe Food System in Australia¹⁰⁰



Overarching food policy is set by the ministers in Australia and New Zealand that are responsible for food regulation. These ministers make up the **Australia and New Zealand**.

¹⁰⁰ PP. 02

Ministerial Forum on Food Regulation. The Forum develops food regulatory policy and policy guidelines that FSANZ must have regard to when setting food standards.

Food Regulation Agreement gives effect to a commitment by Commonwealth, State and Territory governments to a national approach to food regulation within Australia.

Responsibility of Commonwealth/States/Territories - In addition to DAWR's imported food testing, the state and territory jurisdictions have responsibility for ensuring that all food, including imported food, meets the requirements of the **Australia New Zealand Food Standards Code** at the point of sale.

Food Standards Australia New Zealand (FSANZ) is an independent statutory agency established by the Food Standards Australia New Zealand Act 1991. FSANZ is part of the Australian Government's Health portfolio. It is primarily the risk assessor and standard developer.

FSANZ develops standards that regulate the use of ingredients, processing aids, colourings, additives, vitamins and minerals. The Code also covers the composition of some foods, e.g. dairy, meat and beverages as well as standards developed by new technologies such as genetically modified foods. FSANZ is also responsible for some labelling requirements for packaged and unpackaged food, e.g. specific mandatory warnings or advisory labels.

FSANZ is not an enforcement agency. It coordinates food recall actions in close coordination with the food authority in the jurisdictions. Food industry members initiate the majority of food recalls.

Food business is defined as any business or activity that involves the handling of any type of food for sale, or the sale of food in Australia.

OzFoodNet, Australia's enhanced foodborne disease network, under the Department of Health, addresses foodborne incidence, illness and surveillance and investigate epidemiology of foodborne diseases Web reference is at: www.health.gov.au/cdi.

Imported Food Inspection Scheme (IFIS) by DAWR: Imported Food Control Act requires all imported food to be safe and comply with Australia New Zealand Food Standards Code. IFIS is a risk based inspection scheme to verify food is safe and compliant

The Department of Health's Office of Health Protection monitors and controls **zoonoses** from the human health side and provides its data to the **National Animal Health Information System** for reporting in the Animal Health Surveillance Quarterly. Numerous public health committees also involve the VS as per the information already provided.

At jurisdictional level state health authorities monitor and control zoonotic diseases in humans in the jurisdiction.

Zoonotic diseases in animals are monitored and controlled in the jurisdiction by the respective Biosecurity agencies.

Jurisdictions are responsible for the regulatory oversight of the **dairy industry**, and implement the following animal health specific controls throughout this industry:

- Dairy farms are licensed and are required to operate a comprehensive Food Safety Program that includes the purchase, storage and use of veterinary chemicals. Licensees are required to document the purchase, storage and use of these substances, record withholding periods and ensure any milk sourced from these animals is removed from the human consumption market;
- Licensed dairy processors are required to test every batch of raw milk for veterinary chemicals under their mandated Food Safety Programs. No raw milk can be further processed until the successful completion of these tests has returned a negative result. In cases where a positive result is recorded, the facility must immediately remove the entire load of milk from the production cycle and notify the Food Authority.

Authorised officers investigate the positive result which will include an assessment of the farm where the licensee failed to correctly follow their systems on the use of veterinary chemicals to ensure that effective controls are immediately implemented.

Regulatory oversight of bee keeping and honey production is also managed by the jurisdictions.

Memorandum of understanding (MoU) arrangements between the respective Food Authority and the DAWR extend to the regulatory oversight of the production of **game meat** for human consumption. All game animals must be assessed by a qualified Meat Safety Inspector prior to being permitted for sale for human consumption. The Inspectors ensure that all animals have been harvested correctly and fully comply with the Australian Standard for the Hygienic Production of Wild Game Meat for Human Consumption (AS 4464:2007)¹⁰¹ which clearly documents the standards required for the sale of game meat for human consumption.

Jurisdictions also regulate **retail food outlets**. As an example in the Northern Territory Retail Butcher Shops including supermarkets are regulated by the Department of Environmental Health and a MoU is in place defining the “line of demarcation” to prevent regulatory gaps or over regulation and audit duplication. Speciality Shops such as chicken retail shops, cafes, restaurants and commercial kitchens are also regulated by the Department of Environmental Health. The MoU defines that greater than 40% wholesale should be regulated by DPIF and greater than 40% retail should be regulated by Environmental Health. All business regulated by DPIF must operate with an approved HACCP plan, which must be approved by the Chief Inspector under the Meat Industry Act. Businesses operating under Environmental Health do not require a HACCP program. Primary Produce including meat is defined as Primary Produce “not having undergone substantial transformation”.

Strengths:

- Australia’s food regulation system and being a cooperative bi-national arrangement involving Australia and New Zealand.

¹⁰¹ <http://www.publish.csiro.au/Books/download.cfm?ID=5697>

II-9 Veterinary medicines and biologicals	Levels of advancement
<p><i>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.</i></p>	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 of the regulation related to the control over veterinary medicines and veterinary biologicals, including prudent use of antimicrobial agents 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): Appendix 1

Evidence (listed in Appendix 5): E.01.2, E.01.2.3.1, E.01.2.4, E.01.2.8, 2M.22, 2MM.22, 2MM.30, 2MM.24.

Findings:

Note: The term *Veterinary chemical products* is used in Australia for veterinary medicinal products.

The **Australian Pesticide and Veterinary Medicines Authority (APVMA)**¹⁰² is an Australian government statutory authority established in 1993 to centralise the registration of all agricultural and veterinary chemical products into the Australian marketplace. Previously each State and Territory government had its own system of registration. The APVMA was previously known as the National Registration Authority (NRA). The APVMA and DAWR work collectively to undertake applicable risk analyses for veterinary biologicals.

Principal responsibilities - The authority's principal responsibilities are described in the Agricultural and Veterinary Chemicals (Administration) Act 1992 and the Agricultural and Veterinary Chemicals Code Act 1994.

Funding - Except for a minor budgetary appropriation, the APVMA's activities are funded through cost recovery. This is in accordance with the agreement which established the National Registration Scheme. Most of the APVMA's operational income is collected from registrants of pesticides and veterinary medicines. Registrants pay application fees to register products, and an annual fee to maintain product registrations. Registrants also pay levies based on the annual wholesale sales value of registered products.

Australian legislation includes:

- Agricultural and Veterinary Chemicals Code Act (1994) – Deals with registration of veterinary chemical and biological products.
<https://www.comlaw.gov.au/Details/C2015C00113>
- Agricultural and Veterinary Chemicals Administration Act (1992) - Deals with the administration the National Registration Authority and the National Registration Scheme.
<https://www.comlaw.gov.au/Details/C2015C00393>
- Therapeutic Goods Act 1989 – deals with poison scheduling, prescribing, and compounding. <https://www.comlaw.gov.au/Details/C2015C00086>
- The Poisons Standard July 2015 – lists all drugs and poisons including agricultural and veterinary chemicals and human medicines.
<https://www.comlaw.gov.au/Details/F2015L00844>

¹⁰² <http://apvma.gov.au/node/1063>

Veterinary chemical products are regulated through applications, registrations, permits and licences. Permits may be issued for minor off-label, research or emergency purposes. Veterinary chemicals can only be manufactured in Australia in accordance with an APVMA licence issued under the Manufacturing Quality and Licensing Scheme. This scheme requires the manufacturing of products to the Australian Code of Good Manufacturing Practices (GMP) for Veterinary Chemical Products. Overseas manufacturers of veterinary chemical products also adhere to a GMP Scheme which gives recognition to overseas manufacturers who can manufacture products to a code comparable to the Australian GMP Code.

The APVMA MRL Standard contains a list of **maximum residue limits** the APVMA has established to cover residues arising in foods and animal feeds. The MRL Standard is referenced by various state laws and is used to monitor whether approved directions for use of veterinary chemical products have been followed.

Supply of veterinary chemical products¹⁰³

Unless exemptions apply, veterinary medicines must be registered before being possessed and supplied in Australia. All products are scheduled under uniform health laws according to their risk to human health and/or the need for advice prior to their use. They can be exempt from scheduling or can be classified from Schedule 2 to Schedule 9 as listed in the **Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)**.

Schedule 4 (S4) poisons for **veterinary use** are **prescription only medicines**, such as antibiotics, anti-inflammatories, anaesthetics, anabolic hormones, corticosteroids, prostaglandins etc. They are only available from a registered veterinarian or in some cases from a registered pharmacist on presentation of a prescription from a registered veterinarian.

Schedule 5 (S5), Schedule 6 (S6) and schedule 7 (S7) veterinary medicines are available through retail outlets and include the internal and external parasiticides, growth promotants, certain premixes and certain mineral drenches.

Schedule 8 (S8) poisons for veterinary use **may only be prescribed by a registered veterinarian**. They include ketamine, butorphanol, methadone and other controlled drugs. Veterinarians must keep detailed records of purchase, destruction and use of these substances and must store them in an appropriate safe.

Feed mills may be licensed by state health departments to purchase and possess S4 substances. Feed mills may only supply a stock feed containing an S4 substance to the owner or person having custody or care of a flock or herd of animals on the written order of a registered veterinary practitioner who is treating that flock or herd of animals. An exception is when the S4 substance is incorporated at a concentration that results in the substance being rescheduled as S5.

The Agvet Code excludes products prepared by a veterinarian in his/her clinic or by a pharmacist through a veterinary prescription, from being regulated by the APVMA. Products prepared through this mechanism can be supplied once the supply satisfies the legislation of the jurisdiction in which supply occurs.

Professional Compounding Pharmacist: The Therapeutic Goods Administration (TGA) is part of the Australian Government Department of Health. Medicines extemporaneously compounded by a pharmacist for individual patient use are exempted from the registration, listing and manufacturing requirements in Parts 3-2, 3-2A and 3-3 of the Act. Done on a prescription of a veterinarian and one animal only and only if no veterinary medicine or human medicine is available. Independent legal advice should also be sought by pharmacists involved in the compounding of veterinary medicines, to provide assurance that they are operating within the parameters of the Agricultural and Veterinary Chemicals Code (AGVET Code) and any other relevant state, territory and Commonwealth legislation.

¹⁰³ E.01.2

Use of veterinary chemical products

The use of all veterinary chemical products is controlled by individual state and territory control of use legislation. A searchable database of registered products (PUBCRIS) provides users with the latest approved label of registered products, and permits that are available to the public.

Veterinary surgeons are legislatively limited in their authorisation of unregistered and compounded veterinary medicines on trade species animals. Veterinary surgeons recommending off-label uses are obligated to supply certain information to end users of veterinary drugs such as withholding periods.

The Team was informed by some jurisdictions that instances of non-compliance with prescribing and dispensing directives occurred. Such actions could result in disciplinary procedures by the respective Veterinary Board.

Sale of veterinary medicinal products and biologicals:

Visit to an Agricultural and Veterinary products retailer showed that vaccines were stored in compliance with “cold chain” requirements and antimicrobials were only supplied on veterinary prescription. Regular compliance audits by APVMA are conducted at veterinary medicines wholesalers.

Strengths:

- Registration and regulation of veterinary medicinal products by the APVMA.

Recommendations:

- The Team recommends that relevant authorities take note of and implement relevant governance activities in terms of OIE **Code Chapter 6, article 6.9.6** which deals with “**Responsible and prudent use of antimicrobial agents in veterinary medicine**” and provides guidance with the aim of protecting both animal and human health as well as the environment. It defines the respective responsibilities of the Competent Authority and stakeholders such as the veterinary pharmaceutical industry, veterinarians, animal feed manufacturers, distributors and food animal producers who are involved in the authorisation, production, control, importation, exportation, distribution and use of veterinary medicinal products (VMP) containing antimicrobial agents.
- Veterinarians should only prescribe antimicrobial agents for animals under their care.
- All relevant authorities (including government agencies at the national and jurisdictional level, and VSBs) should address system weaknesses with regard to prescribing and dispensing of veterinary medicinal products.

II-10 Residue testing	Levels of advancement
<i>The capability of the VS to undertake residue testing programmes for veterinary medicines (e.g. antimicrobials and hormones), chemicals, pesticides, radionuclides, metals, etc.</i>	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): Appendix 1

Evidence (listed in Appendix 5): E.01.2, E.01.2.2.2, E.01.2.3.1, E.01.2.4, 2H.2, 2H.3, 2PP.6.

Findings:

The National Residue Survey (NRS) implements a national residue monitoring plan on behalf of the Department of Agriculture and Water Resources. NRS residue monitoring in animal products is conducted through random and targeted testing. Random residue monitoring includes 12 meat programs (cattle, sheep, pigs, camels, deer, goats, horses, kangaroos, poultry, emu, ostrich and wild boars), an egg program, a honey program, and two aquatic animal programs (aquaculture and wild-caught seafood). Chemicals tested under the random monitoring programs include antibiotics, anthelmintic, insecticides, hormonal growth promotants, other veterinary drugs and banned substances. Honey is also subject to residue testing under the program.

NRS also manages testing programs for residues of agvet chemicals and environmental contaminants. Tests are conducted on raw food for a wide range of chemicals normally used in food production, including insecticides, fungicides, preservatives, antibiotics, anthelmintic and hormonal growth promotants.

Random monitoring programs (RMPs) test for chemicals currently used in agriculture and environmental contaminants. The latter include heavy metals and environmentally persistent chemicals eg organochlorines no longer registered for use in agriculture. An RMP is a statistically based survey that provides a defined level of confidence in residue status.

In addition, NRS collates results from industry QA testing and testing undertaken in a range of other monitoring and surveillance programs and provides this information to industry and State authorities such as Biosecurity Queensland (BQ) or NSW Department of Primary Industries (DPI). These programs are:

- National Antibacterial Residue Minimisation (NARM);
- Targeted Antibacterial Residue Testing (TART);
- Sheep Targeted Antibacterial Residue Testing (START);
- National Organochlorine Residue Monitoring (NORM); and
- Hormone Growth Promotant (HGP) Free Accreditation Scheme.

Laboratories conducting testing for the National Residue Survey are accredited to the international standard for testing and calibration laboratories, ISO/IEC 17025. Methods used for NRS testing are accredited by the national accrediting body, the **National Association of Testing Authorities (NATA)** or international equivalent (See II.2). The National Residue Survey also holds certification under ISO 9001 and is accredited as a proficiency test scheme provider under ISO/IEC 17043.

All states and territories participate actively in residue testing programs including the National Residue Survey (NRS), the National Organochloride Residue Management (NORM) Program, National Antibacterial Residue Minimization (NARM) Program, Hormone Growth Promotant (HGP) free accreditation scheme and the Targeted Antibacterial Residue Testing (TART).

As an example in one jurisdiction, any detection of significant residues from **Queensland** is notified by NRS to Biosecurity Queensland (BQ) for investigation, traceback, regulatory action and reporting. In Queensland the Chemical Residue Laboratory carries out tests on meat, animal products and animal feed for pesticide and antibiotic residues, plant material, fruits and vegetables for pesticide residue. Where necessary, field officers will investigate sources of contamination and assist with elimination processes, which can involve quarantine of a property. This service is part of the National Antibiotic Residue Minimisation (NARM) Program, the National Residue Survey and Biosecurity Queensland programs for the control of antibiotic and pesticide residues in Queensland fruits and vegetables and meat products. Testing of cattle dips used to control cattle ticks is conducted in conjunction with Biosecurity Queensland stock inspectors to ensure that cattle dips remain at the correct strength for maximum effectiveness and to reduce issues related to tick resistance and chemical residues in stock.

In Western Australia properties regulated under the National Organochlorine Residue Management (NORM) program are given a management plan which is subject to yearly auditing and an example was cited by the team.

II-11 Animal feed safety <i>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.</i>	Levels of advancement
	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): Appendix 1

Evidence (listed in Appendix 5): E.01.2, E.01.2.3.1, E.01.2.4, E.07.22, 2H.8, 2H.9, 2M.15, 2MM.40, 2PP.7.

Findings:

There is no statutory requirement for stock feed manufacturers to be registered with a government authority. The regulatory responsibility for medicated animal feed lies with the states and territories.

In addition, industry with the assistance of the Australian Government and states and territories have developed codes of practice to assist industry in meeting regulatory requirements. Industry has also developed quality schemes relevant to feed – *Feedsafe*, the industry Quality Assurance program for livestock feed.

TABLE 15: Number of registered animal feed establishments in Australia

Commercial Feed mills authorised for production of medicated feeding stuffs	
New South Wales	29 (updated 2015)
Queensland	33 (no update from 2009)
South Australia	8 (no update from 2009)
Tasmania	1 (updated 2015)
Victoria	25 (no update from 2009)
Western Australia	11 (no update from 2009)

Audits of Stock Food labels are a National requirement. The process followed is set out in the **Australian Ruminant Feed Ban National Uniform Guidelines**, which require, inter alia, a specified number of annual stock feed manufacturer, retailer and producer audits.

Under the **Transmissible Spongiform Encephalopathies (TSE) program**, jurisdictions maintain a list of stock food manufacturers for auditing purposes, to ensure ruminant feed ban compliance. Jurisdictions are required to keep the list up to date, and audit according to the frequency and standards set down by the National TSE Program.

These standards are listed at:

<http://www.animalhealthaustralia.com.au/programs/biosecurity/tse-freedom-assuranceprogram/australian-ruminant-feed-ban>

A “National Feed Safety Standard” has been under development for a decade and, according to information provided, most technical issues have been resolved. However, in order to promulgate the necessary legislation at jurisdictional level, the finalisation of this standard at national level is a prerequisite.

Jurisdictional swill feeding legislation is consistent with the nationally agreed definitions of prohibited pig feed. Reports of non-compliance are investigated as per specific compliance and enforcement policies.

Residue trace-back investigations to identify animal feed safety issues are undertaken in accordance with national agreements. A recent example has been detections of low levels of nicarbazin in eggs with the APVMA seeking to establish an MRL in eggs to cover situations of inadvertent cross contamination during feed milling.

Jurisdictional legislation and/or regulations provide the legal instruments to approve quality assurance programs for feed manufacturers.

The following links provide additional information on “Feedsafe” and general stock feed information:

http://www.sfmca.com.au/feedsafe/about_feedsafe/

<http://apvma.gov.au/node/10631>

Strengths:

- Regular inspections and controls are carried out in the case of medicated animal feeds as well as stock labels, salmonella testing and compliance with the ruminant feed ban.
- Ban on swill feeding is strongly enforced.

Weaknesses:

- Limited authority of jurisdiction to regulate feed safety in the absence of National animal feed standards.
- Not all feed mills are accredited.
- No updated list of establishments.

Recommendation:

- Complete National Animal Feed Standards and incorporate them into jurisdictional legislation/regulations.
- Maintain updated lists of establishments in each jurisdiction.

II-12. Identification and traceability	Levels of advancement
A Animal identification and movement control <i>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.</i>	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): Appendix 1

Evidence (listed in Appendix 5): E.01.2.2.2, E. 01.2.3.1, E.01.2.4, E.9.1.2.4, E. 07.2, E.07.22, E. 07.24, E. 07.24, 2H.5, 2.PP.3, 2M.7, 2M.9, 2M.10, 2M.11, 2M.11, 2M.12, 2M.13, 2M.14, 2M.16.

Findings:

The National Livestock Traceability Performance Standards (NLTPS) were endorsed by all jurisdictions in 2004 and were the result of consultation with state and territory technical advisors and industry experts. It is envisaged that all states and territories and industry systems will aim to meet these standards.

The National Livestock Identification System (NLIS) is Australia's system for livestock identification and traceability. All cattle, sheep and goat producers must identify their stock and record their movements onto and off properties on the NLIS database. All movements to and from sale yards and to abattoirs are also recorded. The NLIS is a wholly-owned subsidiary of Meat and Livestock Australia and it operates it on behalf of the industry and government. It is funded through livestock transaction levies.

When fully implemented for a type of livestock, the NLIS is a permanent, whole-of-life system that allows animals to be identified – individually or by mob – and tracked from property of birth to slaughter, for the purposes of food safety, animal health/disease control, product integrity and market access.

Australia's state and territory governments are responsible for the legislation that governs animal movements, and therefore for implementing the NLIS. The implementation of the NLIS is enforced in the different jurisdictions through Livestock Acts and Regulations. Jurisdictions also carry out compliance monitoring checks throughout the livestock supply chain to ensure that those consigning, receiving and slaughtering stock are complying with NLIS requirements.

Information on animal movements is recorded on movement documents and submitted to the NLIS database by producers, sale yard operators, livestock agents and processors. NLIS Limited administers the NLIS database on behalf of industry and government stakeholders. This includes managing the development and operation of the database in accordance with stakeholder requirements.

NLIS for cattle: NLIS (Cattle) is an electronic identification system in which each animal is tagged with a radio frequency identification device, and accompanied by movement documentation (National Vendor Declaration – NVD) when moved from a property. It is accompanied by the National Vendor Declaration, linking it to the Property Identification Code (PIC) and the National Cattle Health Statement.

In certain jurisdictions, it is compulsory to also brand cattle before they are moved off a property or are sold (unless they are less than 8 months of age). An industry funded cattle NLIS helpdesk and cattle NLIS working group ensure that cattle identification and movement requirements are being met. The helpdesk provides assistance in accessing the NLIS database and performing uploads; in clarification of error and warning messages from the NLIS database; and on the interpretation of inconsistencies in movement data.

NLIS for sheep and goats: NLIS (Sheep and Goats) is a mob-based system for tracing mobs of sheep and farmed goats. It uses visually readable ear tags labelled with property identification codes. When mobs are transported, they are accompanied by a movement document, such as an NVD or a waybill. An electronic identification for sheep and goats is under consideration and should be adopted as emerging technologies and added values to the producer can be applied.

NLIS for pigs: The pig industry is continuing to develop NLIS (Pork). Currently, it is a mob-based system based on tattoos and brands to identify the property of birth, along with movement documents. SAFEMEAT has developed draft business rules for NLIS (Pork), which were endorsed in July 2014 by the Agriculture Senior Officials Committee (comprising the heads of the Australian, state, territory and New Zealand primary industries government agencies). The business rules include reporting of animal movements throughout the supply chain. Some further testing is to be done before NLIS (Pork) is presented to agriculture ministers for final approval. This will be followed by enactment of legislation by the states and territories to enable mandatory reporting of movements.

In certain jurisdictions, there are controls on the introduction of stock from other states and territories. For example, in Queensland the controls are governed by the Stock Act 1915 and are set out as specified in the Stock Regulation 1988. Before moving livestock into a new jurisdiction, owners must certify the health of their animals by completing the prescribed certificates, waybills and health statements, and deliver these to the receiver of the stock. In Queensland, certificates of health and waybills must accompany the stock and be kept for 2 years by the receiver. Other jurisdictions have similar but slightly different requirements, including retention of certificates for 7 years.

Biosecurity officers inspect and audit cattle and sheep at saleyards, abattoirs and depots for compliance with NLIS identification and database requirements.

Reports of identification and traceability non-compliance are investigated as per the Departments compliance and enforcement policy.

In certain jurisdictions police are recognized as inspectors to also administer the NLIS requirements. In these cases, police officers are entitled to undertake compliance and enforcement activity for livestock identification and movement non-compliance.

Strengths:

- Excellent identification system to trace animal history, location and distribution for purposes of animal disease control, food safety, and trade.
- The management of NLIS benefits the producer from the information generated.

Recommendation:

- Continue to advance electronic identification for sheep as benefits and cost become more acceptable to industry groups and producers.

B. Identification and traceability of products of animal origin	Levels of advancement
<i>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.</i>	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): Appendix 1

Evidence (listed in Appendix 5): PP.04.

Findings:

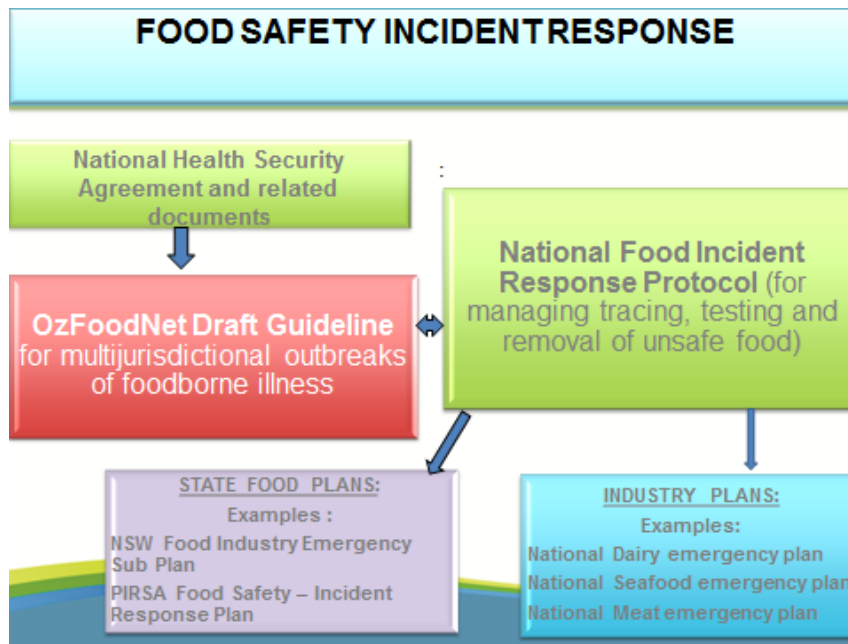
Chapters 3 (Food Safety Standards) and 4 (Primary Production and Processing Standards) of the *Australia New Zealand Food Standards Code* (the Code) specify requirements for food businesses to ensure they can trace food received by the business and sold by the business. There are specific traceability requirements for:

- seafood businesses (Standard 4.2.1)
- dairy primary production, transport and processing businesses (Standard 4.2.4)
- poultry processors (Standard 4.2.2)
- egg producers and egg processors (Standard 4.2.5)
- seed sprout processors (Standard 4.2.6)
- meat and meat products (Standard 4.2.3)

As specified in the FSANZ Act of 1991, FSANZ liaise with food businesses and state/territory governments to collate information required for a food recall: disseminate this information to government, food industry and consumers, and monitor the effectiveness of food recalls, on behalf of the Australian Consumer and Competition Commission (ACCC), in consultation with the states/territories.

These requirements are consistent with international (Codex) standards that work on the principle of being able to trace food products ‘one step back’ and ‘one step forward’ in the food supply chain.

FIGURE 9: Food Safety Incident Response¹⁰⁴



Most pork products are traced from paddock to plate through traceability systems such as the 'PigPass' National Vendor Declaration (NVD). This system provides key information that can be used to trace pigs or pork back to the property of origin in the event of an emergency, such as an animal disease outbreak or a food safety incident

FIGURE 10: Food Safety Traceability¹⁰⁵

TRACEABILITY

Food Standards Code
 Chapter 3 – food receipt and food recall
 Chapter 4 – primary production and processing requirements
 i.e. have a traceability system identifying the immediate supplier and immediate recipient of the food product.
 Guidance material

Typical Food Supply Chain

The supply chain diagram consists of seven colored boxes in a row: Ag Suppliers (blue), Producers (red), Processors (green), Further Processors (purple), Wholesalers/Distributors (light blue), Retailers/Food Service (orange), and Customers (black). To the right, there is a screenshot of a 'FOOD INDUSTRY RECALL PROTOCOL' document and a screenshot of a web-based traceability system interface.

Cattle production, buffalo harvest and crocodile harvest on Aboriginal Land must comply with all relevant regulations, with no exemptions. The same applies to the relevant industry standards. Cattle and Buffalo are largely covered by the same requirements for transport, NLIS, animal welfare and meat industries standards.

¹⁰⁴ PP. 04

¹⁰⁵ PP. 04

II-13 Animal welfare <i>The authority and capability of the VS to implement the animal welfare standards of the OIE as published in the Terrestrial Code.</i>	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): Appendix 1

Evidence (listed in Appendix 5): E.01.2, E. 01.2.3.1, E.01.2.4, E.01.2.8, E.07.22, EM.08, 2H.12, 2MM.23, 2MM.38.

Findings:

The Australian (Federal) Government is responsible for trade and international agreements relating to livestock welfare including live animal exports and export abattoirs. Its Department of Agriculture and Water Resources (DAWR) has responsibility for international aspects of animal welfare including their contribution in partnering with the OIE to develop and implement the OIE **Regional Animal Welfare Strategy** and the **Improved Animal Welfare Program (IAWP)** supported by Australia and implemented by the OIE to build capacity in slaughter welfare standards. Australia has also developed a globally unique **Exporter Supply Chain Assurance Scheme (ESCAS)** targeting the welfare of live exports in their destination country.

ESCAS was set up following criticism on how live animal exports were handled in the destination country following a constructive response between industry, NGO's and Government. This was to ensure that exported animals reached their intended destination and were handled, stunned and slaughtered there according to OIE requirements.

DAWR has responsibility for international aspects of animal welfare including a leading contribution partnering with the OIE to develop and implement the Regional Animal Welfare Strategy, see:

http://www.daff.gov.au/Style%20Library/Images/DAFF/_data/assets/pdffile/0016/2360014/ra_ws-edition2-2013-15.pdf

In addition DAWR supported the Improving Animal Welfare Program, implemented by the OIE to build capacity in slaughter welfare standards, see:

<http://www.oie.int/animal-welfare/improved-animal-welfare-programme/>

In addition during the transport of live animals by ship a stockman gives daily reports and if the voyage is longer than 10 days a veterinarian is also on board. There is a trigger point for a full review if mortality reaches a certain level.

DAWR led the development of the **Australian Animal Welfare Strategy (AAWS)** (www.australiananimalwelfare.com.au). However, the Australian Government withdrew funding and staffing for the AAWS at the end 2013 and suggested that the leadership of AAWS be taken on by the States and Territories. A recently held National Animal Welfare Roundtable by all relevant stakeholders¹⁰⁶ highlighted the need to re-engage with the Commonwealth Government to improve Australia's reputation and standing in regards to animal welfare. DAWR supports the development of animal welfare standards and guidelines for a range of production animals and also sees this as important to protect its export markets.

¹⁰⁶ EM.08

There are model codes of practice; completed for cattle and sheep and others are being progressed e.g. poultry. Transport of animals to abattoirs is regulated throughout by the jurisdictions (land transport standards and guidelines 2012) but by DAWR if problems are found upon arrival at an export establishment. There are also guidelines for stunning in export establishments and in-house welfare officers also monitoring animal welfare at the slaughterhouse. It was noted that there is industry funding for research into animal welfare.

These processes follow a business plan for the development of standards and guidelines.

<http://www.animalwelfarestandards.net.au/files/2011/01/Animal-Welfare-Standards-and-Guidelines-Development-Business-Plan.pdf>

The National Animal Welfare Standards can be found at the following website <http://www.animalwelfarestandards.net.au/>

and the transport ones at <http://www.animalwelfarestandards.net.au/land-transport>

The state and territory governments in partnership with the Royal Society for the Prevention of Cruelty to Animals (RSPCA) have the principal responsibility for livestock welfare in each of the jurisdictions. Animal Health Australia (AHA)¹⁰⁷ is committed to achieving good animal welfare and has established the **Livestock Welfare program** as part of its core business. AHA does not have any regulatory responsibility for livestock welfare but contributes to improving livestock welfare through participation in policy development and by facilitating liaison between stakeholder groups. AHA works within the **Australian Animal Welfare Strategy (AAWS)** which sets the strategic direction for livestock welfare in Australia. As part of the strategy, the AHA Livestock Welfare program is coordinating a major review of livestock welfare model codes of practice and their conversion into livestock welfare standards.

It is noted that in Australia livestock are defined as farmed domesticated animals and this includes: cattle, sheep, goats, pigs, horses, donkeys, poultry, alpacas, emus, ostriches, deer, camels, and water buffalo.

Australian pork producers voluntarily agreed to phase out the use of gestation stalls by 2017, the first national pork industry to take this step.

Another major welfare concern of importance to the feedlot industry in some jurisdictions is covered by the Katestone Heat Load Project, which is supported by AHA. This supports the operations in feedlots where climatic conditions i.e. high temperatures, may impact on the welfare of animals.

The welfare of laboratory animals used in research is taken care of by the jurisdictions see the following links for more information:

<https://www.nhmrc.gov.au/health-ethics/animal-research-ethics>

<http://www.nhmrc.gov.au/guidelines-publications/ea28>

http://kb.rspca.org.au/what-is-the-australian-legislation-governing-animal-welfare_264.html

There is a Wild Dog Action Plan which is supported by AHA as wild dogs are an important predator of domestic animals.

In general jurisdictions apart from having their own animal welfare legislation (there is no Australian national legislation), have various committees, issue guidelines and have compliance units and emergency response disaster plans that cover animal welfare.

Each jurisdiction's animal welfare legislation can be found at:

<http://www.agriculture.gov.au/animal/welfare/state>

¹⁰⁷ <http://www.animalhealthaustralia.com.au/programs/livestock-welfare/>

One jurisdiction has developed a risk-based approach for targeting livestock biosecurity compliance and enforcement activities which is probably adequate, but is yet to be implemented. The successful application of this new approach will be challenged by the growing demand for animal welfare investigations (see IV-2 for more information). Combined with a decline in staff resourcing, this growing demand places pressure on the jurisdiction's capacity to perform other forms of animal health fieldwork.

Only one jurisdiction is fully responsible for Animal Welfare, while others involve the RSPCA. However in the same jurisdiction animal welfare during the transport of live animals involves the Australian government.

The OIE Collaborating Centre on Animal Welfare and Bioethics involves both Australia and New Zealand and there is a focal point for animal welfare at the federal level. It was noted in one jurisdiction that the OIE Focal Point for Welfare was unknown.

Strengths:

- OIE collaborating centre on Animal Welfare and Bioethics.
- There is industry funding by a levy for research into animal welfare.
- In the area of animal welfare, Australia was actively engaged in the standard setting process and led the development of a regional strategy for animal welfare in the Asia-Pacific region.

Recommendations:

- Enhance involvement of OIE National Focal Animal Welfare at jurisdictional levels.
- Re-engagement of DAWR in the Australian Animal Welfare Strategy (AAWS) was a definite need expressed to the OIE PVS Team at jurisdictional level and should be further pursued.

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	Communication
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 other interested parties 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.

III-1 Communication	Levels of advancement
<i>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</i>	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): Appendix 1

Evidence (listed in Appendix 5): E.01.2, E.07.2, E.01.2.4.

Findings:

DAWR has a dedicated Communications group and within this group is a section dedicated to national biosecurity communications, the Biosecurity Safeguarding team, which includes specialists in animal health communications. This group contributes departmental membership to the Biosecurity Incident National Communications Network (NCN) which coordinates communications between governments and industry during biosecurity incidents including emergency animal disease outbreaks. Animal Health Australia also has a dedicated Communications specialist who also sits on the NCN.

The Biosecurity Incident National Communication Network (NCN) produces nationally consistent public information in response to pest and disease outbreaks, and animal welfare incidents. Members are communication managers from the Australian and state and territory government agencies responsible for biosecurity, and from Animal Health Australia and Plant Health Australia.

In 2014, the Biosecurity incident public information manual was finalised and published as an AUSVETPLAN resource document¹⁰⁸

Biosecurity Animal Division within the department also has a staff member with specific skills and responsibility for communications who is also the OIE Communications Focal Point. This person has an international focus and not only links with the OIE, but also participates in and coordinates inputs for events like World Veterinary Day, World Rabies Day, etc.

The Communications Unit in DAWR generates a bi-monthly newsletter, 'Biosecurity Matters', as well as brochures on travel, biosecurity and citizens' awareness. It provides talking points to all relevant DAWR Divisions and coordinates with all jurisdictions to ensure a consistent message is delivered throughout Australia. It has an active web page and establishes a telephone hotline when needed.

The Communication Unit has an Agreement with DAWR Information Technology (IT) to establish an on-line presence and receive all needed support within 2 hours of an incident.

Communication relating to routine on-shore activities are the responsibility of state and territory governments' Communication Units.

Australia has also developed detailed biosecurity planning support for farmers, which is an on-line program funded by AHA Members, which contributes to industry farm biosecurity obligations under EADRA. (www.farmbiosecurity.com.au). Farm Biosecurity is a national awareness and engagement program that provides information to livestock producers and

¹⁰⁸ The manual describes how public information will be delivered across all jurisdictions during a biosecurity incident.

related service providers about on-farm biosecurity and prevention of animal diseases and plant pests. The program is a joint initiative of AHA and Plant Health Australia. It encourages producers to identify risks to their livestock and plant products, and minimise these risks by incorporating on-farm biosecurity measures into their everyday operations.

Farm Biosecurity uses a number of channels to communicate its messages about the six biosecurity essentials for good on-farm biosecurity. These channels include established and new electronic media, a range of educational materials and direct stakeholder engagement. The program promotes the Emergency Animal Disease Watch Hotline and the Exotic Plant Pest Hotline to report unusual signs of diseases or pests.

There is a Screw Worm Fly (SWF) communications program focusing on awareness raising among producers in northern Australia, live export yards and abattoirs. In 2014, SWF was included in awareness/call-to-action material developed for, and distributed to, livestock producers and smallholders, as part of a renewed *Spotted Anything Unusual?* national campaign.

Communication with the Media: Media plans are prepared by media and/or communication officers for all sensitive or controversial issues, major public awareness campaigns and major projects and elsewhere as appropriate. The media team will work with business units (especially technical staff) to prepare these plans. Approval processes are the same as for all media releases including those identified in a communication plan.

III-2 Consultation with interested parties	Levels of advancement
<i>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</i>	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): Appendix 1

Evidence (listed in Appendix 5): E.01.2, E.01.2.8, E.07.22.

Findings:

At the national level, there is a well-established and efficient consultation mechanism through Animal Health Australia (AHA). AHA is a not-for-profit public company comprised of 32 members, associate members and service providers representing commonwealth, state and territory governments, major national livestock industry organisations and service providers. Its role is to facilitate improvements in Australia's animal health policy and practice in partnership with the livestock industries, governments and other stakeholders. AHA builds capacity to enhance emergency animal disease preparedness, to ensure that Australia's livestock health systems support productivity, competitive advantages and preferred market access, and to contribute to the protection of human health, the environment and recreational activities. There are several established mechanisms to ensure the active participation and collaboration by the Commonwealth, jurisdictions and interested private sector stakeholders.

A very large number of consultation meetings were also organised with government, industry and community stakeholders during for the development of the new national Biosecurity Act (2015).

Wildlife Health Australia (WHA) has a strong One Health focus and helps to link the animal health, public health and environmental sectors through consultations and its active network.

State and Territory's Consultative Committees: Effective engagement with livestock industries at state and territory level is also critical to the livestock disease preparedness. The veterinary authorities interact with these industries through a range of consultative committees that provide advice on wide-ranging issues, including policy and legislative changes, program coordination and project funding. These committees have been valuable in giving livestock industries the opportunity to provide input to government decision-making on various biosecurity issues and funding priorities. The veterinary authorities undertake further stakeholder engagement with livestock industries and private veterinary practitioners through a variety of training (including disease simulation) activities.

National Johne's Disease Control Program (NJDCP): The BJD Review managed by AHA involved widespread and fully transparent government, industry group, farmer and public consultation.

Strengths:

- Well-structured, formal cross- sectoral consultations at national and jurisdictional levels;
- Trusting relationship between Commonwealth, jurisdictions and private sector;
- History of planning and successful implementation of stakeholder consultation through established national mechanisms such as AHA, EADRA and CCEAD, and also at jurisdictional levels.

III-3 Official representation	Levels of advancement
<i>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).</i>	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 participate ¹⁰⁹ 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): Appendix 1

Evidence (listed in Appendix 5): E.07.2, E:07.3.

Findings:

Australia has a long standing history of active involvement in OIE activities. Australia complies with its obligations on disease notifications, as documented by the OIE's WAHIS disease notification system, and is actively involved in the standard setting process by providing constructive electronic comment to the reports of the specialized commissions. The OIE Delegate consults widely within Australia, including with industry, to seek inputs on OIE Code developments and updates.

The Australian Delegate is currently a member, and vice-president of the OIE Council. He has identified the national focal points for all areas of expertise. The General Sessions of the OIE World Assembly of Delegates are always well attended by Australian government, as well as industry representation.

In the area of animal welfare, Australia was actively engaged in the standard setting process and later led the development of a regional strategic plan for animal welfare in the Asia-Pacific region.

Australia is also an active financial contributor to the OIE Animal Health and Welfare Trust Fund, and attends its annual meetings.

Australia has also been actively involved in Codex Alimentarius committees and standard setting activities. Australia currently Chairs the Codex Committee on Food Import & Export Inspection & Certification Systems.

It also participates in the WTO SPS Committee activities, and was one of the few members involved in the drafting of the SPS Agreement text.

Strengths:

- Longstanding active participation by Australia in global and regional OIE activities;
- Active participant in Codex Alimentarius and WTO SPS activities.

¹⁰⁹ *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	Levels of advancement
<i>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.</i>	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): Appendix 1

Evidence (listed in Appendix 5): E.01.2, E.01.2.2.2, E.01.2.4, E.01.2.8, E.15.1.

Findings:

There are 2 main categories of Accreditation for private veterinarians.

1. Accreditation Program for Australian Veterinarians (APAV)¹¹⁰

APAV is the national program designed to integrate private veterinary practitioners into the national animal health system to support the international standing of Australia's animal health service capability. The program aims to have an internationally recognised process for accrediting non-government veterinarians for involvement in government and industry animal disease programs. Animal Health Australia maintains a database of APAV accredited veterinarians' details to facilitate engagement of accredited veterinarians by governments or industries with responsibility for APAV operational programs. The APAV requires these agencies to conduct audits of the APAV veterinarians employed in their programs.

At the time of reporting there are 653 veterinarians registered as **APAV (Accreditation Program for Australian Veterinarians)** accredited. Of the 653 registered APAV veterinarians, 209 are also **Market Assurance Program (MAP)** accredited.

2. Australian Government Accredited Veterinarian (Livestock) (AAVet)¹¹¹

The AAV course is a prerequisite for accreditation as an Australian Government Accredited Veterinarian (AAV). The AAV course is designed to inform veterinarians involved in the pre-export preparation and/or shipboard services for livestock of their legislative responsibilities as an Australian Government Accredited Veterinarian (Livestock). It also provides relevant background information about the livestock export process. It is an on-line learning course with examinations that require passing before accreditation can be granted. There appears to be no practical component. At the time of reporting, there are 134 AAVs who are accredited to carry out approved export programs and inspections for the export of livestock¹¹².

Veterinary para-professionals carrying out inspection services are delivered either by department officials called Food Safety Meat Assessors (FSMAs) or Australian Government Authorised Officers (AAOs). The latter are employed by the establishment or by a department approved service provider, such as an independent AAO employer, to satisfy importing market requirements for Australian Government health certification. FSMAs and

¹¹⁰

<http://www.animalhealthaustralia.com.au/training-centre/accreditation-program-for-australian-veterinarians-apav/>

¹¹¹

<http://www.animalhealthaustralia.com.au/training-centre/australian-government-accredited-veterinarian-livestock-aavet>

AAOs are subject to on-going performance verification against national performance standards and the results are recorded in a national database. Where AAOs perform post-mortem inspection on cattle, sheep and goat establishments, all carcasses are subject to assessment by a FSMA. AAOs are bound to the department through a 'Deed of Obligations', have appropriate qualifications and must be assessed as capable prior to being appointed to the position of an Australian Government Authorised Officer.

Police officers are authorised under the Biosecurity legislation, nationally to support these activities, if needed.

There is extensive and effective use of private laboratories and there are 9 private or industry based laboratories throughout Australia providing high level NATA accredited services at different locations e.g. IDEXX and Gribbles at different locations.

Some jurisdictions also have more specific accreditation systems such as for:

- a) private cattle tick inspection service providers or approved persons and an "approved person" is required to be approved by the Chief Inspector under Section 61(a) of the Stock (Cattle Tick) Notice 2005;
- b) private veterinarians undertaking all field work associated with the Ovine Brucellosis Accreditation Scheme and they charge their usual fees to the client. Private veterinarians must be accredited to operate within the accreditation scheme. Accreditation of veterinarians is free of charge;
- c) The police are recognised as inspectors under for the NLIS requirements are therefore entitled to undertake compliance and enforcement activity for livestock identification and movement non-compliance.

Strengths:

- Animal Health Australia and governments or industries have responsibility for APAV operational programs. They are required by APAV to conduct audits of the APAV veterinarians employed in their programs.
- The public sector of the VS carries out audits of its accreditation / authorisation / delegation programs through an internationally recognised process for accrediting non-government veterinarians for involvement in government and industry animal disease programs. in order to maintain the trust of their trading partners and interested parties.

III-5 Veterinary Statutory Body (VSB)	Levels of advancement
A. VSB authority <i>The VSB is an autonomous regulatory body for veterinarians and veterinary para-professionals.</i>	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): Appendix 1

Evidence (listed in Appendix 5): E.01.2.2.2, E.01.2.4, E.01.2.8.

Findings:

The Veterinary Schools Accreditation Advisory Committee (VSAAC) is the Australian body responsible for vet school accreditation and achievement of national and international standards in veterinary education. It provides advice to the state veterinary registration boards. VSAAC undertakes site visits to veterinary schools and the schools are required to report annually against the AVBC standards for veterinary education.

<https://www.avbc.asn.au/wp-content/uploads/documents/public/AVBCStandards2015.pdf>

Veterinary School curricula in Australia/NZ all have to meet VSAAC standards, which align with Royal College of Veterinary Surgeons (RCVS) standards. For those schools that are accredited by the American Veterinary Medical Association (AVMA) as well, their competencies are also addressed. All schools have a program description of learning outcomes and the way they address day 1 competencies, on their websites.

All jurisdictions have statutory Veterinary Surgeons Boards responsible for the registration of veterinarians, licensing of veterinary facilities, upholding professional ethics and the institution of disciplinary actions and investigation of complaints regarding veterinary practices. Differences regarding board membership, appointment procedures, functions and responsibilities exist between the different Veterinary Boards.

ACT: The ACT Veterinary Surgeons Board (the Board) is a statutory body established to regulate veterinary practice in the public interest. The Minister for Territory and Municipal Services introduced into the Legislative Assembly on 14 May 2015, the Veterinary Surgeons Bill 2015. The purpose of this Bill is to repeal the Health Professionals Act 2004 and create professional specific legislation for veterinary surgeons. The Veterinary Surgeons Board is comprised of six registered veterinary surgeons, and one community representative, four appointed by the ACT Minister for Territory and Municipal Services in accordance with the Health Professionals Regulation 2004 and three - elected by veterinary surgeons registered in the ACT and through an election process.

NSW: The Board is an independent state government statutory corporation. Its responsibilities include registering veterinary practitioners, licensing veterinary hospitals and investigating complaints about the practice of veterinary science in NSW. The Board is a body corporate established under the Veterinary Practice Act 2003. This Act and Veterinary Practice Regulation 2013 are within the portfolio of the Minister for Primary Industries. Board members are appointed for a 3 year term by the Governor of NSW. The Board consists of 6 veterinarians and 2 non-veterinarians.

NT: Veterinary Board of the Northern Territory Members are the Chief Inspector, 2 registered veterinarians elected by registered veterinarians by postal ballot to represent the interests of registered veterinarians; and 2 persons (i) one of whom is not and never has been a registered veterinarian or a veterinarian registered under an Act of a State or another Territory of the Commonwealth and who is appointed by the Minister to represent the public

interest after considering the recommendation, if any, of the Board; and (ii) one of whom may be, but need not be, a registered veterinarian, appointed by the Minister after considering the recommendation, if any, of the Board.

QLD: The Veterinary Surgeons Board of Queensland (the Board) is a statutory authority established by the Veterinary Surgeons Act 1936 representing the State of Queensland and being part of the Department of Agriculture and Fisheries for the Financial Accountability Act 2009. It has the sole legislative responsibility for the regulation of veterinary science in Queensland. The Board consists of a chairperson, two (2) elected members and three (3) other persons nominated by the Minister for Agriculture, Fisheries and Forestry. Five (5) members of the Board are required to be veterinarians. All members, other than the chairperson, are appointed for a term of not more than three years. The nominated member who is not a veterinarian is appointed to represent consumers on the Board.

SA: The Veterinary Surgeons Board of South Australia regulates the veterinary profession in South Australia, to ensure high standards of the profession are maintained so that the public has confidence in the profession. The Board also acts in the interests of animal welfare. The Board consists of 8 members appointed by the Governor, of whom 6 are nominated by the Minister, one is nominated by the Australian Veterinary Association Ltd (SA Division), and one is nominated by Council of the University of Adelaide. Of the 6 Ministerial nominations, one is a legal practitioner, 4 are veterinary surgeons and 2 are laypersons.

TAS: The Veterinary Surgeons Act 1987 provides for the registration of veterinary surgeons, the regulation of the practice of veterinary surgery and incidental matters. The Veterinary Board of Tasmania consists of five members appointed by the Minister for Primary Industries and Water. One community member is nominated by the Minister, another is a registered veterinary surgeon employed in the Department of Primary Industries, Parks, Water and Environment (DPIPWE) and nominated by the Secretary. The remaining three members are appointed by the Minister from a panel of five registered veterinary surgeons nominated by the Australian Veterinary Association (Tasmanian Division) (AVATas).

VIC: The Veterinary Practitioners Registration Board of Victoria is a statutory authority created through the passing of the Veterinary Practice Act 1997. The Board comprises of nine members, who the Minister nominates and the Governor in Council appoints: four members must be veterinary practitioners; one member must be a veterinary practitioner employed by the Crown; one member must be a veterinary practitioner employed by The University of Melbourne; one member must be a lawyer; and two must be persons who are not veterinary practitioners, known as community members. Board appointments are for a three-year term and Members are eligible for re-appointment. There is a definition of veterinary practice but no definition of an act of veterinary surgery in this Act.

WA: Subject to the Minister, the Veterinary Surgeons' Board is responsible for administering the Veterinary Surgeons Act 1960 as amended. The Veterinary Surgeons' Board is an independent statutory authority responsible for administering the Veterinary Surgeons Act 1960 in Western Australia. The Board has wide ranging powers and is responsible for ensuring that the high standards of veterinary surgery in Western Australia are maintained.

The Board maintains the registers of Veterinary Surgeons, Specialist Veterinary Surgeons, Veterinary Nurses, Trainee Veterinary Nurses, Authorised Persons, Body Corporates and Veterinary Premises and investigates allegations of unprofessional conduct.

Western Australia is currently the only state in Australia where Veterinary Nurses are required to be registered with the Veterinary Surgeons Board of WA, after acquiring the national qualification Certificate IV in Veterinary Nursing. For information regarding registration of Vet Nurses in WA, please go to the following website:

<http://www.vsbwa.org.au/index.php/nurses/>

In conjunction with the Australasian Veterinary Boards Council and the Animal Health Committee, the AVA¹¹² helped develop a model for national recognition of veterinary registration across Australia. This was to allow veterinarians to move and practise more easily across state borders, and also to allow greater competition in veterinary services in line with National Competition Policy.

In the past, veterinarians have been required to be registered in every state they want to practise, and this initiative reduces red tape, as well as allowing greater freedom of movement for veterinarians responding to national crises or working for national animal enterprises.

State legislation to enact the model is in the process of being introduced progressively across jurisdictions. In **Victoria, New South Wales, Queensland and Tasmania**, veterinarians registered in another Australian jurisdiction can practise without registering again in those states. Other states and territories are in the process of preparing similar legislation. **South Australia** commenced national recognition of veterinary registration on 1 January 2015.

Strengths:

- Veterinary Statutory Bodies are established in all jurisdictions.

Weaknesses:

- Except for WA, no veterinary statutory body (VSB) in the jurisdictions has identified categories of veterinary paraprofessionals to be regulated.
- The Veterinary Acts vary between jurisdictions.
- In VIC there is no definition of an act of veterinary surgery in their Veterinary Practice Act 1997.

Recommendations:

- Investigate the identification and registration of veterinary para-professionals in accordance with the **OIE Terrestrial Animal Health Code definition**, *....being 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 in accordance with need (end of quote)*¹¹³.

¹¹² <http://www.ava.com.au/node/1058>

¹¹³ E.02.2

B. VSB capacity	Levels of advancement
<i>The capacity of the VSB to implement its functions and objectives in conformity with OIE standards.</i>	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): Appendix 1

Evidence (listed in Appendix 5): E.05.2 – all Annual Reports, 2MM.24.

Findings:

All Veterinary Boards have the legal framework to execute their various functions and responsibilities.

All Boards have qualified registrars to manage the respective administrative functions and assist in policy development, financial administration, the keeping of required registers etc. Boards maintain a Records Management Policy in compliance with its obligations under the relevant State/Territory legal requirements.

Funding is through membership payments and aim at cost recovery of the services rendered.

Where applicable, respective State / Territory Finance Acts, require an auditor to provide an opinion on a statutory body's financial report. All Boards, however, subject their financial statements to professional external audits.

Boards have the functional capacity to implement their objectives, and have a transparent process of decision making.in accordance with OIE Standards.

Detailed Annual Reports by the respective Veterinary Boards are published in a timely manner and are freely accessible on their websites.

Variations in licensing procedures and targeted veterinary establishments exist in the various jurisdictions, e.g. all facilities are regularly inspected, or only veterinary hospitals are licensed, no mobile clinics are licensed etc.

In several jurisdictions the pressure on human and financial resources limit their functional capabilities.

CPD is required by almost all jurisdictions (still being implemented in one) who have agreed, through the Australasian Veterinary Boards Council (AVBC) and the Australian Veterinary Association (AVA), that a minimum of 60 CPD points must be attained over a consecutive three year cycle. Most state registration boards require minimum levels of CPD activity to retain board registration.

The Team noted variations in the jurisdictions in the application of and processes relating to disciplinary measures e.g. some maintaining Board control and some involving external tribunals. Potential outcomes for the disciplinary action taken are similar and efforts are underway to ensure records of successful disciplinary action are shared between jurisdictions via the AVBC.

Strengths:

- VSBs have the capacity to implement their objectives, have transparent decision making processes and are audited at regular intervals.

Weakness:

- In some jurisdictions limited human and financial resources impact on service capacity. There are considerable differences in registration fees charged (initial and annual) amongst the jurisdictional Boards.
- The Team noted variations in the jurisdictions in the application of disciplinary measures.
- Variations in licensing procedures and targeted veterinary establishments exist in the various jurisdictions, e.g. all facilities are regularly inspected, or only veterinary hospitals are licensed, no mobile clinics are licensed etc.

Recommendations:

- Review of capacities for institutional management and application of disciplinary measures at all jurisdictional VSBs.
- Investigate administrative differences between jurisdictions concerning action on reports of professional malpractice, temporary suspensions and termination of registration; and
- The responsible and prudent use of antimicrobial agents in veterinary medicine is a very important responsibility of veterinarians (see Chapter 6.9, article 6.9.6. of the OIE Terrestrial Animals Health Code) and VSBs are strongly encouraged to use their role to issue applicable prescribing and dispensing guidelines to veterinarians and provide for disciplinary actions in cases of non-compliances in partnership with the relevant authorities.

III-6 Participation of producers and other interested parties in joint programmes <i>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</i>	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): Appendix 1

Evidence (listed in Appendix 5): E.01.2.2.2, E.01.2.8, E.07.2.

Findings:

Producers and other interested parties are pro-actively engaged in the design, funding and delivery of animal health and food safety programs throughout Australia. At the national level, this work is formally organized under **Animal Health Australia** (AHA), a not-for-profit public company established by the Australian, state and territory governments and major national livestock industry organizations. See: <http://www.animalhealthaustralia.com.au> and E.07.02.

AHA provides an innovative and effective mechanism for an array of joint programs for the national animal health system. These programs are either core subscription or stakeholder specific funded initiatives. Core subscription funded activities have a collective benefit and are funded at prescribed levels by all members while stakeholder specific programs are funded by primary beneficiaries. Programs cover:

- [Disease Surveillance](#): a nationally integrated surveillance system to underpin trade;
- [Emergency Animal Disease Preparedness](#) to enhance capability to detect and respond to emergency animal diseases;
- [Livestock Health](#) Program aims to improve capability, standards and performance of the national animal health system;
- A [Biosecurity](#) Program that draws together all projects associated with reducing the disease risks facing Australian livestock production industries;
- A [Livestock Welfare](#) program contributes to policy development and facilitates liaison between stakeholder groups;
- A [Johne's Disease](#) Program is funded by industry to manage this disease in sheep, cattle, goats, deer, and alpaca to reduce the impact of the disease on the industries;
- [Training](#) in support of EADRA to enable trained personnel to participate in the management of an EAD incident; and
- [Farm Biosecurity](#) to help secure properties against pests and disease.

In this context it is worth mentioning the **Australian Johne's Disease Market Assurance Programs (MAPs)** which is a key strategy in the control of Johne's disease in Australia. MAPs are voluntary programs for producers which enable them to identify and promote their negative Johne's disease status to their clients. Herds and flocks in the MAP are not accredited as free of Johne's disease, but they have a low risk of being infected compared to Non-Assessed herds and flocks. Producers can minimise the spread of Johne's disease by sourcing replacement animals from MAP assessed herds or flocks.

The MAP programs have three levels of assurances to cater to the widest range of commercial and seed stock producers across the livestock industries. They are supported by annual management audits and a program of veterinary testing which ranges from annual testing initially, progressing to triennial testing as herd/flock assurance level increases. Detailed species specific manuals exist for each MAP sub-program. MAP herds/flocks are independently audited with approximately 30% of enrolled herds or flocks selected each year. At the time of the PVS Evaluation mission this had been temporarily suspended while the national BJD review was being conducted.

Another national partnership, **SAFEMEAT** links the red meat and livestock industry and the state and federal governments of Australia. See: <http://safemeat.com.au>. **SAFEMEAT** has identified eight key industry priorities which it addresses through three year strategic plans:

- 1) Standards and regulations;
- 2) Emergency disease management;
- 3) Animal diseases (as they relate to food safety) including TSE;
- 4) Residues;
- 5) Pathogens and pathogen management;
- 6) Systems development and management, including NLIS;
- 7) Communication and education; and
- 8) Emerging issues such as advancements in biotechnology.

Producers also contribute funds for animal health research and control activities at State/Territory levels through a range of levy arrangements. Some examples follow:

- **South Australia** currently has a compulsory, voluntary levy under which industry contributes money. Nevertheless, the Team heard concerns that some programs are not sustainable due to funding cuts by government as well as financial constraints by industry members.
- In **New South Wales** animal biosecurity and welfare is a shared responsibility. Animal biosecurity priorities are delivered by NSW DPI in cooperation with Local Land Services (LLS) along with other government, industry and community stakeholders, including private veterinarians¹¹⁴. Funding is raised quite effectively from rates levied on landholders across NSW. As elsewhere the OIE PVS Team noted that public and private veterinarians are well regarded in the respective communities they serve and therefor emphasize strong public-private partnership.
- In West Australia a **virulent footrot control program** is funded by the sheep and goats industry through the WA Sheep and Goats Industry Funding scheme. Under the program affected producers have the options of eradicating the disease from their properties by destocking or inspection or they can opt for a control option where they remain in quarantine but are limited in where they can sell stock. All inspection and surveillance costs are met by the Industry Funding scheme for producers who contribute to the scheme.

Industry also contributes through a levy to fund research into animal welfare.

¹¹⁴ www.dpi.nsw.gov.au

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	Levels of advancement
<p><i>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</i></p>	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): Appendix 1

Evidence (listed in Appendix 5): E.01.2, E.01.2.2.2, E.01.2.4, E.07.25.

Findings:

New national legislation is usually developed following a review process. Drafts are prepared with extensive consultation internally, between the jurisdictions and with stakeholders. The primary legislation are Acts which are Bills during the drafting process and these when finalised are submitted to the usual Parliamentary processes passing through both Houses of Parliament (House of Representatives and the Senate at various Committees and then final vote in each House. Once agreed, they are officially published. After Acts the secondary legislation consists of Regulations, Determinations, Declarations, Orders and Proclamations. Determinations can be adopted within a couple of hours for urgent matters.

There is a Legislation Handbook issued by the Department of the Prime Minister and Cabinet, Canberra and this provides a description of the procedures involved in making Commonwealth Acts. Cabinet procedures are set out in the Cabinet Handbook. Procedures for making subordinate legislation, such as regulations, are set out in the Federal Executive Council Handbook.

As Australia has a Federal system each jurisdiction then sets down its own specific legislation following the requirements laid down in the Constitution however jurisdictions may not enact similar legislation at the same time which causes implementation difficulties.

A good example of the legislative process is where DAWR has led the development of the recently promulgated Biosecurity Act 2015. All biosecurity relevant Divisions of the Department including veterinary and other staff from across Animal, Exports and Services Delivery Divisions were involved in developing the new Biosecurity Act 2015, including identifying policy needs, providing technical inputs, reviewing drafts etc. Legal expertise was closely involved in guaranteeing its internal quality and a comprehensive stakeholder consultation program throughout all stages of development assisted with assuring its external quality.

There was considerable consultation with and input from all stakeholders. The WTO/SPS was notified at various stages of its development. It eventually passed through Parliament

with only one change concerning the formalisation of the position of the Inspector General for Biosecurity as both main parties were strongly supportive.

A lot of work has gone into making the new Biosecurity Act clear with good internal and external quality.

Implementation of the new Biosecurity Act including through the development of subsidiary regulations is one of the current major priorities for the DAWR. The Act will come into force in June 2016 replacing the 1908 Quarantine Act. Work is in hand to have adopted, before the Act comes into force,

In general the legislation strongly targets a common approach to sector responses and highlights producer responsibility.

In addition SAFEMEAT¹¹⁵ assists in developing nationally consistent legislation relevant to the meat industry, promoting consistency in interpretation and application of regulation – and contributing to national policy development and program management.

Several jurisdictions are drafting their own Biosecurity Acts and some are aligning their new legislation to come into operation in June 2016, corresponding to the Australian Government's new legislation. These jurisdictions have also undertaken similarly wide consultation seeking participation by all stakeholders, with state and territory parliamentary procedures similar to the Australian Government parliamentary processes at national level.

This legislation process does vary between jurisdictions. Government agencies are required to prepare a Regulatory Impact Statement (RIS). To enable public scrutiny of regulatory decisions, agencies must publish these on their websites after a Bill is introduced into Parliament or a Regulation is published in the Gazette. Other supporting documents such as discussion papers, position papers and draft Regulations may also be published. Where regulatory proposals are particularly contentious, further consultation may take place through public forums, meetings with stakeholders or through statutory councils and advisory committees.

In many cases there has been a good consolidation of existing legislation. In one State the Biosecurity Act consolidated the various biosecurity legislation consisting of many different Acts that were developed independently over the past hundred years and contained many inconsistencies and were not flexible enough to meet the challenges of today's biosecurity environment. The new Act allows for a consistent, modern, risk-based and less prescriptive approach to biosecurity.

Extensive consultation occurred with key industry and peak body groups including industry bodies, representative groups and particular interest groups from the early stages of policy development through to the release of an exposure draft in July 2011. Consultation continued with peak industry bodies, particular interest groups and relevant government departments through 2012/13.

In one jurisdiction Acts, regulations and other statutory instruments are under regular review to ensure that the policy objectives remain valid and that the terms remain appropriate for securing those objectives. This includes mandatory 5 year reviews of many Acts and all regulations made under an Act. Any new legislation or amendment to existing legislation receives the highest scrutiny. All legislation is drafted by specialist legislation lawyers and officers within the Parliamentary Counsel's Office. All legal drafting is done in close consultation with relevant technical and policy experts. Also, for all new regulations and in certain other circumstances, extensive public consultation of the proposed legislation to ensure its acceptability and appropriateness is undertaken

There are also numerous statutory and government requirements to ensure that any new legislation or amendment to existing legislation is reasonable and appropriate and that the

¹¹⁵ <http://safemeat.com.au>

economic and social costs and benefits (direct, indirect, tangible and intangible) of the proposed option and alternative options have been assessed.

The generally consistent approach to managing biosecurity threats to environmental, community and economic assets make it easier for stakeholders and regulators to effectively manage biosecurity risks.

Legislation in some jurisdictions is quite old e.g. some legislation regulating the veterinary profession in some jurisdictions. Although some have been amended, others may benefit from redrafting. In addition the draft for Australian national standards for animal feed has been under discussion for some 10 years.

Information on the Commonwealth legislation can be found at:

<http://www.agriculture.gov.au/about/legislation>

Strengths:

- Recognised federal/state roles
- Consultation and review
- New Biosecurity Act

Weakness:

- Proposed national animal feed standards have been under development for a decade, delaying the development of legislation at jurisdictions (see **CC II-11**).

Recommendation:

- Update legislation regulating the veterinary profession, with the inclusion of veterinary paraprofessionals, at jurisdictional level.

IV-2 Implementation of legislation and regulations and compliance thereof	Levels of advancement
<i>The authority and capability of the VS to ensure compliance with legislation and regulations under the VS mandate.</i>	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): Appendix 1

Evidence (listed in Appendix 5): E.01.2, E.01.2.2.2, E.01.2.8, E.07.22.

Findings:

DAWR has a Compliance Division, which works collaboratively across the department to develop and implement a regulatory compliance strategy that builds on the existing Biosecurity Compliance Strategy.

It ensures the most efficient and effective deployment of risk management tools to achieve biosecurity compliance – not just at the border, and develops compliance policy and standards for all of regulatory programs.

The Division builds consistency in regulatory approaches and identifies opportunities for reducing regulatory burden, aligns approaches to compliance for DAWR clients, and applies and improves analytics and intelligence for targeting of compliance activities.

In addition it is important to repeat in this context that there is an Interim Inspector-General for Biosecurity (appointed by and reporting directly to the Minister of Agriculture and Water Resources). The Interim Inspector General for Biosecurity's mission is to enhance the integrity of Australia's biosecurity systems through the independent evaluation and verification of the performance of these programs across the biosecurity continuum – pre-border, border and post-border. He is tasked to identify any weaknesses and, where possible, opportunities to improve the biosecurity system

States and territories apply different forms of compliance activity as relevant to their legislation and regulations as described in the state/territory regulations and directives.

Jurisdictions have their own units for enforcement of non-compliance and are generally responsible for monitoring and enforcing stakeholder compliance with livestock disease related Acts, requiring a risk-based approach to targeting enforcement activities.

In general the majority of compliance and enforcement activity has focused on:

- investigating reported cases of livestock welfare issues;
- auditing compliance with the requirements of the National Livestock Identification System at sale yards, abattoirs and knackeries; and
- auditing food outlets to identify illegal swill feeding practices.

Growing public awareness of animal welfare issues has significantly increased the number of animal welfare investigations undertaken. As an example, as shown in Figure 11 below, between 2010 and 2013 the number of animal welfare investigations conducted by the Victoria animal health staff increased from 348 to 816

It was also reported that animal welfare compliance activities now account for approximately one-third of its animal health field work. This increased workload has been compounded by a 42 per cent reduction since 2010 in the number of departmental staff available to undertake fieldwork.

FIGURE 11: DEDJTR Animal welfare activities 2010 - 2014¹¹⁶

Figure 4D
DEDJTR animal welfare activities 2010 to 2014

Compliance activity	2010	2011	2012	2013	2014
Investigations	348	315	600	816	688
Prosecutions	6	7	9	5	11
Warning letters	3	1	2	3	4
Advice—written or verbal	24	40	52	88	77
Unsubstantiated allegation	21	34	80	82	62

Source: Victorian Auditor-General's Office.

The emphasis overall is mainly on the implementation of the legislation and correcting non-compliances rather than resorting to prosecutions. Some jurisdictions mentioned that the introduction of on-the-spot fines might be useful rather than spending a lot of time and resources on gathering enough information for a prosecution.

Strengths

- Office and authority of the Inspector-General for Biosecurity.
- Audits performed by Offices of Auditor-General (VIC & QLD).

¹¹⁶ E.07.22

IV-3 International harmonisation	Levels of advancement
<i>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.</i>	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 standards¹¹⁷, and use the standards to harmonise national legislation, regulations and sanitary measures.

Terrestrial Code reference(s): Appendix 1

Evidence (listed in Appendix 5): E.01.2.


Findings:

The establishment of a robust Import Risk Analysis (IRA) team in DAWR operating consistently with OIE standards regarding risk analyses for imports into Australia allows Australia to lay down and defend its very high appropriate level of protection (ALOPs) by ensuring that the national legislation and regulations under their mandate take account of relevant international standards. Australia is consistent with its international obligations under: WTO/SPS Agreement, CODEX and OIE guidelines in meeting Australia's ALOP.

FIGURE 12: Import Risk Analysis and International obligations¹¹⁸

(Biosecurity) import risk analysis – (B)IRA

- Consistent with international rights and obligations
 - open, transparent
 - science-based
 - consultative
- Appropriate level of protection - ALOP
- International standards e.g. OIE, Codex
 - e.g. OIE Risk Analysis Chapter 2.1
- Equivalence
- Subject to appeal on process



<http://www.agriculture.gov.au/SiteCollectionDocuments/ba/publications/gmacconference2008/import-risk-analysis-handbook-2011.pdf>

¹¹⁷ A country could be active in international standard setting without actively pursuing national changes. The importance of this element is to promote national change.

¹¹⁸ PP.05

DAWR also actively participates in promoting higher international animal welfare and animal health standards in a number of countries overseas.

Sanitary requirements differ for each importing country. In order to gain market access all animals and animal products must meet importing country requirements. To ensure that all stakeholders are aware of their responsibilities, DAWR developed the Manual of Importing Country Requirements (MICoR) to outline importing country requirements for each of meat, dairy, fish, live animals, plants, eggs and non-prescribed goods. For meat and meat products MICoR contains all requirements that differ from the relevant Australian Standards. All establishments must adhere to the Australian Standards and Australian monitoring systems (such as the National Residue Survey - NRS and the carcass microbiological monitoring program for E.coli and Salmonella - ESAM) in addition to the importing country requirements.

Often an importing country and DAWR will develop a mutually agreed protocol or memorandum of understanding to facilitate trade. These documents are developed and approved in the early stages of market access communications and are followed by the development of appropriate health certificates and eventual establishment approvals the commencement of trade. All information contained in protocols and agreements with importing countries is outlined in the Manual of Importing Country Requirements (MICoR).

IV-4 International certification ¹¹⁹	Levels of advancement
<i>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.</i>	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): Appendix 1

Evidence (listed in Appendix 5): E.01.2.4, E.07.2 p. 101, 2PP.5.

Findings:

DAWR regulates and provides export certification for animal genetic material, live animals, and foods derived from animals and animal by-products under the *Export Control Act 1982* being exported from Australia. A comprehensive list of subordinate legislation to the Act, as well as to the *Australian Meat and Live-stock Industry Act 1997* and applicable *Commonwealth legislation is provided* in doc. E.07.2 and Appendix 5.

It is important to highlight the importance to Australia of its exports in the veterinary domain. In AUD in billions the following sectors earn: Beef meat AUD 9, Sheep meat AUD 2.9, Live animal exports AUD 1.6, Wool AUD 3, other products AUD 2.7 i.e. a total of more than AUD 19 billion. Concerning the red meat sector 70-75% of production is exported and this sector alone employs around 200,000 people.

The **Tracking Animal Certification for Export (TRACE)** system supports the electronic submission of export applications for livestock and reproductive material, livestock export licence applications, registered premises applications and applications for accreditation under the Accreditation Program for Australian Veterinarians. TRACE supports more than 100 external stakeholders and handled 601 live animal export consignments in the 2013–14 financial year.

In conjunction with the Manual of Importing Country Requirements (MICoR) and the Exporter Supply Chain Assurance System (ESCAS), the export certification system reduces the administrative burden on exporters, informs the exporter about importing country requirements, and aims to ensure that animal welfare standards are maintained. The department's national office assesses export applications, and licenses livestock exporters and veterinary officers in regions to inspect livestock and prepare certification documentation.

DAWR's Exports Division is responsible for regulating the export of edible animal products and by-products prescribed under the Export Control Act 1982, such as meat, dairy, fish, eggs, wool, skins and hides. The division issues export documentation, including export permits and certificates. Producers and exporters must meet specified criteria confirming that their exports meet the requirements of importing countries before export documentation can be issued.

DAWR regulates exporters across the supply chain and this includes regulation of livestock exports including performance management of exporters, AAVs (Australian Accredited Veterinarians) and registered premises operator. The AAVs undergo online training provided by AHA and have to pass this course prior to being accredited.

¹¹⁹ Certification procedures should be based on relevant OIE and Codex Alimentarius standards.

For live animal exports the National Vendor Declaration provides property and health status declarations (Property of Origin - POO) as part of the export certification process for livestock (including cattle, sheep, goats, horses, pig semen, pigeons and aviary birds).

These documents enable livestock exporters to comply with international market requirements for import and enables the veterinarians in the jurisdictions to ensure that animals intended for export are originating from properties certified free from relevant notifiable animal diseases (as per importing country requirements). This state level certification is an important component of the broader export program that is administered by the Australian Department of Agriculture and Water Resources.

Live animals intended for export are then gathered at feedlots/collection centres prior to shipment where they are fed and watered to adjust to on-board conditions. They can be quarantined and tested as required by the importing country. This work is carried out by the AAVs who are paid by the exporter and supervised by the regional DAWR veterinarians (Biosecurity veterinarians).

Biosecurity veterinarians also supervise the final inspection, assessment of back up document/certification and issue export certificate and permit during the loading procedures where again AAVs are responsible for inspection and medication where required. Biosecurity veterinarians are not present during the whole period of this final loading procedure. The export permit is issued basically for use by Customs to allow the export.

There is an on-going trial of reduced procedures for exports to try to ease the administrative burden on exporters. There is concern by the Biosecurity veterinarians that under this proposed new system some of their powers will be diminished. The most important document for them is the permission to leave the feedlot following inspection by them. This change in procedure may mean that there is less supervision by Biosecurity veterinarians at the feed lot and then any problems which occur will only be highlighted at the port.

Live animal export voyages by boat which are 10 days or longer require that an AAV is on board to supervise and intervene as necessary. This supervision is also done for maiden voyages or in special cases. In all cases (i.e. irrespective of the journey time) approved stockmen are present and they or the veterinarian are obliged to send in daily reports and submit a final report in regard to deaths and illness etc. There is an action level at which the number of deaths will initiate an inquiry.

In addition the Exporter Supply Chain Assurance System (ESCAS) must be fulfilled in order to demonstrate that agreed welfare requirements and tracking of animals is met in the importing country. The Australian exporters work closely with importers and international independent auditors to ensure that the supply chain requirements are met.

Strengths:

- Federal/state/industry partnerships.
- Acceptance by trading partners.

Weakness:

- AAVs contracted by the private sector creates a perceived conflict of interest, even if supervised by an official veterinarian.

Recommendation:

- Consider ways to mitigate perceived conflicts of interest.

IV-5 Equivalence and other types of sanitary agreements	Levels of advancement
<i>The authority and capability of the VS to negotiate, implement and maintain equivalence and other types of sanitary agreements with trading partners.</i>	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): Appendix 1

Evidence (listed in Appendix 5): E.02.2; E.07.2.

Findings:

Equivalence is a condition wherein the sanitary measures proposed by an exporting country as an alternative to those of the importing country, are accepted as achieving the same level of protection.

Due to Australia's favourable pest and disease status, it maintains a high national biosecurity level and high appropriate level of protection (ALOP). This can make establishing equivalence agreements on sanitary matters relevant to animals and animal products with trading partners difficult.

However, a strong equivalency agreement has been established between Australia and New Zealand. The Trans-Tasman Recognition Arrangement (TTMRA) is a non-treaty arrangement between the Australian (Commonwealth), state and territory governments of Australia and the Government of New Zealand, under the TTRMA Recognition Act of 1997.

The key operating principle of the TTMRA is mutual recognition. Most food exported to Australia from New Zealand is not assessed for compliance with Australian food standards, and vice versa. Both countries share food standards (as set by FSANZ) and imported food control systems which are designed to protect public health and safety to a high level.

This means that under the TTMRA most risk category foods and all surveillance category foods from New Zealand are not subject to the requirements of the imported Food Control Act 1992.

There are some trade or sanitary import agreements in place with trading partners for a wide range of animals and animal products and new ones are continually being negotiated.

Apart from the Australia-New Zealand equivalency agreement mentioned above, specific animal health trade agreements for specified genetic material from the United States and Canada (with website references) exist:

- For the importation of germplasm Australia recognises US Certified Semen Services standard for the importation of Bovine semen - <https://bicon.agriculture.gov.au/BiconWeb4.0/ViewElement/Element/Index?elementPk=182751&caseElementPk=358720>

- Germplasm may be imported from US bluetongue low incidence states (seasonally free) - <https://bicon.agriculture.gov.au/BiconWeb4.0/ViewElement/Element/Index?elementPk=182751&caseElementPk=358720>
- Germplasm may be imported from Canadian bluetongue free zones - <https://bicon.agriculture.gov.au/BiconWeb4.0/ViewElement/Element/Index?elementPk=21447&caseElementPk=358720>

Strengths:

- Australia's favourable pest and disease status, means it maintains a high national biosecurity level and high appropriate level of protection (ALOP).
- A strong veterinary equivalency agreement has been established between Australia and New Zealand.

Weakness:

- Establishing equivalence agreements on sanitary matters relevant to animals and animal products with trading partners is difficult.

Recommendation:

- The VS is encouraged to continue to 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.

IV-6 Transparency	Levels of advancement
<i>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.</i>	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): Appendix 1

Evidence (listed in Appendix 5): OIE WAHIS.

Findings:

The VS of Australia has a history of full compliance with its notification obligations to the WAHIS system of the OIE. It immediately notifies all new disease detections and submits complete six-monthly reports.

The VS also participates in WTO-SPS Committee meetings and notifies the WTO of changes in regulations and decisions in a timely manner.

The VS regularly informs interested parties of changes in their regulations and decisions on the control of relevant diseases and of the country's sanitary status, as well as changes in the regulations and sanitary status of other countries. Up to date information is made publically available through the dedicated website, as well as telephone hotlines in case of emergencies. It carries out regular audits of their transparency procedures.

IV-7 Zoning	Levels of advancement
<i>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).</i>	1. The VS cannot establish disease free zones. ¹²⁰
	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): Appendix 1

Evidence (listed in Appendix 5): E.01.2.8, E.E.01.2.4.

Findings:

Australia successfully applies zoning to several animal disease control programs.

Cattle tick control program: Various jurisdictions have cattle tick infested areas and are managed by establishing cattle tick infested and free zones. Livestock susceptible to cattle tick are required to be treated and certified free of cattle tick prior to leaving the cattle tick infested areas. An example of relevant jurisdictional legislation is in Queensland where the movement of stock out of an infected zone is regulated by inspection and treatment requirements legislated under the Stock Act 1915 and Stock (Cattle Tick) Notice 2005. Certification is provided following treatment and inspection in approved clearing yards. Other jurisdictions also have relevant legislation for cattle tick control.

In certain jurisdictions there are three cattle tick declared zones: free, control and infected. These programs are currently under review nationally and include NT, QLD, NSW and WA.

Zoning is also applied to other disease programs, including bluetongue and Johne's disease. The current national BJD program is under review.

MAP 4: Bovine Johne's Disease Zones (2012)



¹²⁰ 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"

Australia has begun to explore the use of zoning during emergency animal disease outbreaks e.g. an agreed zoning protocol with the United States in the case of an avian influenza outbreak in either country to allow trade to continue.

Strengths:

- The application of zoning to monitor and control several animal diseases is well managed through active consultation and collaboration between the public and private sector.

Recommendation:

- Progress a national review of cattle tick control and the use of zoning.
- Continue to explore preparedness for the use of zoning during emergency animal disease outbreaks both nationally and internationally.

IV-8 Compartmentalisation	Levels of advancement
<i>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).</i>	1. The VS cannot establish disease free compartments. ¹²¹
	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): Appendix 1

Evidence (listed in Appendix 5): E.01.2.

Findings:

There was little current evidence of interest or activity in establishing compartments. The poultry genetics company *Aviagen* may generate some interest in establishing a poultry compartment for their hatcheries in particular circumstances. This could prove beneficial, even in the absence of export interests, as an established and approved compartment would guarantee continuity of operations in the case of disease incursion within the state. Furthermore, during significant outbreaks of avian influenza in other regions of the world, could open opportunities for export markets to affected countries.

A visit was undertaken to a cattle breeding and seed stock farm producing high quality cattle genetic material for national distribution. The establishment has excellent health and genetic records and the operation conducted thousands of embryo transfers. When considering compartmentalisation as a mechanism to protect their multi-million dollar investment in case of a disease incursion, they responded that this would not be practical due to the risk from the arbovirus, bluetongue.

There is no indication of interest for applying compartmentalisation at this time, therefore this competency is not rated.

NOT APPLICABLE AT THIS STAGE

¹²¹ 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

Australian farmers and agribusinesses are highly reliant on export markets to sell their produce. 58 per cent of Australia's total food production is sold to overseas consumers. Agricultural exports generate 70 per cent of the value for the sector. This reliance on exports requires continual increases in production, value and safety. Australia's modest population and gradual consumption growth leads many Australian farmers to depend on new international markets to expand and maintain profitability¹²². A high animal health and food safety status is thus for Australia of cardinal importance.

The OIE PVS Evaluation of Australia is the first undertaken in a highly developed country. The evaluation results highlight Australia's extraordinary commitment to biosecurity, serving their national interests by maintaining their high animal health status. The very high level of biosecurity is founded on strong partnership collaboration and formal business arrangements amongst the Australian Government, jurisdictions and with the private sector, including primary producers, processors, suppliers of inputs and laboratories. In addition, the evaluation results emphasise Australia's leadership role in the international veterinary community, building respect and understanding of Australia's high animal health status and veterinary capability.

A key biosecurity strategy involves, *inter alia*, dedicated facilities and operations for border security and emergency response. Efficiencies in biosecurity are being gained by shifting the emphasis from response to prevention of biosecurity risks. Raising the capacity on animal health and welfare within the SE Asian region, moves risk management offshore and thereby improves the cost-benefit ratio for animal health. This strategy is supported by a strong commitment and participation in international standard setting.

The OIE PVS Team noted effective – and transparent – communication, consultation and coordination with stakeholders at all levels at Commonwealth and jurisdictional levels.

The Veterinary Service at Commonwealth, as well as at State and Territory level, benefits from the expertise and dedication from its personnel, based on an excellent education system and a comprehensive and effective continuing education system.

Formal and detailed coordination mechanisms of veterinary services at Commonwealth and jurisdictional level with other Government institutions such as the Department of Health and FSANZ, ensure a high level of animal production food safety

The Report highlights identified human and financial resource limitations and provides some specific recommendations at Critical Competency level.

¹²² <http://www.futuredirections.org.au/publications/food-and-water-crises/2022-australia-s-food-export-outlook.html>

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	<ul style="list-style-type: none"> ➤ 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	<ul style="list-style-type: none"> ➤ 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	<ul style="list-style-type: none"> ➤ Point 2 of Article 3.1.2. on Fundamental principles of quality: Independence.
I.5	<ul style="list-style-type: none"> ➤ Point 1 of Article 3.2.3. on Evaluation criteria for the organisational structure of the Veterinary Services. ➤ Point 9 of Article 3.2.14. on Performance assessment and audit programmes.
I.6.A I.6.B	<ul style="list-style-type: none"> ➤ 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	<ul style="list-style-type: none"> ➤ 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	<ul style="list-style-type: none"> ➤ 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	<ul style="list-style-type: none"> ➤ 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	<ul style="list-style-type: none"> ➤ Point 9 of Article 3.1.2. on Fundamental principles of quality: 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. ➤ Point 5 of Article 3.2.14. on Laboratory services.
II.3	<ul style="list-style-type: none"> ➤ Chapter 2.1. on Import risk analysis
II.4	<ul style="list-style-type: none"> ➤ 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.

<p>II.5.A II.5.B</p>	<ul style="list-style-type: none"> ➤ 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 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.
<p>II.6</p>	<ul style="list-style-type: none"> ➤ 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.
<p>II.7</p>	<ul style="list-style-type: none"> ➤ 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.
<p>II.8.A II.8.B II.8.C</p>	<ul style="list-style-type: none"> ➤ Points 6, 7 and 9 of Article 3.1.2. on Fundamental principles of quality: Veterinary legislation / General organisation / Procedures and standards. ➤ Article 3.4.12. on Human food production chain. ➤ 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. ➤ Points 2, 6 and 7 of Article 3.2.14. on National information on human resources / Veterinary legislation, regulations and functional capabilities / Animal health and veterinary public health controls. ➤ Chapter 6.2. on Control of biological hazards of animal health and public health importance through ante- and post-mortem meat inspection. <p>References to Codex Alimentarius Commission standards:</p> <ul style="list-style-type: none"> ➤ Code of Hygienic practice for meat (CAC/RCP 58-2005). ➤ Code of Hygienic practice for milk and milk products (CAC/RCP/ 57-2004). ➤ General Principles of Food Hygiene (CAC/RCP 1-1969; amended 1999. Revisions 1997 and 2003).
<p>II.9</p>	<ul style="list-style-type: none"> ➤ 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.
<p>II.10</p>	<ul style="list-style-type: none"> ➤ 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.
<p>II.11</p>	<ul style="list-style-type: none"> ➤ Chapter 6.3. on Control of hazards of animal health and public health importance in animal feed.
<p>II.12.A II.12.B</p>	<ul style="list-style-type: none"> ➤ 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.
<p>II.13</p>	<ul style="list-style-type: none"> ➤ Section 7 on Animal Welfare
<p>III.1</p>	<ul style="list-style-type: none"> ➤ 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.

	<ul style="list-style-type: none"> ➤ Point 4 of Article 3.2.14. on Administration details. ➤ Chapter 3.3. on Communication.
III.2	<ul style="list-style-type: none"> ➤ 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	<ul style="list-style-type: none"> ➤ Article 3.2.11. on Participation on OIE activities. ➤ Point 4 of Article 3.2.14. on Administration details.
III.4	<ul style="list-style-type: none"> ➤ 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	<ul style="list-style-type: none"> ➤ 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	<ul style="list-style-type: none"> ➤ Points 6 and 13 of Article 3.1.2. 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	<ul style="list-style-type: none"> ➤ 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	<ul style="list-style-type: none"> ➤ 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	<ul style="list-style-type: none"> ➤ 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	<ul style="list-style-type: none"> ➤ 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	<ul style="list-style-type: none"> ➤ 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	<ul style="list-style-type: none"> ➤ 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 IV.8	<ul style="list-style-type: none"> ➤ 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 **2015 OIE Terrestrial Code** that are used in this publication are reprinted here for ease of reference.

For the purposes of the OIE Terrestrial Code:

Acceptable Risk

means a risk level judged by each Member Country to be compatible with the protection of animal and public health within its territory.

Animal

means a mammal, bird or bee.

Animal for breeding or rearing

means a domesticated or confined animal which is not intended for slaughter within a short time.

Animal for slaughter

means an animal intended for slaughter within a short time, under the control of the relevant Veterinary Authority.

Animal handler

means a person with a knowledge of the behaviour and needs of animals who, with appropriate experience and a professional and positive response to an animal's needs, can achieve effective management and good welfare.

Competence should be gained through formal training and/or practical experience.

Animal health management

means a system designed to optimise the physical and behavioural health and welfare of animals. It includes the prevention, treatment and control of diseases and conditions affecting the individual animal and herd, including the recording of illness, injuries, mortalities and medical treatments where appropriate.

Animal health status

means the status of a country or a zone with respect to an animal disease in accordance with the criteria listed in the relevant chapter of the Terrestrial Code dealing with the disease.

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 traceability

means the ability to follow an animal or group of animals during all stages of its life.

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.

Antimicrobial agent

means a naturally occurring, semi-synthetic or synthetic substance that exhibits antimicrobial activity (kill or inhibit the growth of micro-organisms) at concentrations attainable in vivo. Anthelmintic and substances classed as disinfectants or antiseptics are excluded from this definition.

Apiary

means a beehive or group of beehives whose management allows them to be considered as a single epidemiological unit.

Appropriate level of protection

means the level of protection deemed appropriate by the country establishing a sanitary measure to protect human or animal life or health within its territory.

Approved

means officially approved, accredited or registered by the Veterinary Authority.

Artificial insemination centre

means a facility approved by the Veterinary Authority and which meets the conditions set out in the Terrestrial Code for the collection, processing and/or storage of semen.

Beehive

means a structure for the keeping of honey bee colonies that is being used for that purpose, including frameless hives, fixed frame hives and all designs of moveable frame hives (including nucleus hives), but not including packages or cages used to confine bees for the purpose of transport or isolation.

Biosecurity

means a set of management and physical measures designed to reduce the risk of introduction, establishment and spread of animal diseases, infections or infestations to, from and within an animal population.

Biosecurity plan

means a plan that identifies potential pathways for the introduction and spread of disease in a zone or compartment, and describes the measures which are being or will be applied to mitigate the disease risks, if applicable, in accordance with the recommendations in the Terrestrial Code.

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.

Captive wild animal

means an animal that has a phenotype not significantly affected by human selection but that is captive or otherwise lives under direct human supervision or control, including zoo animals and pets.

Case

means an individual animal infected by a pathogenic agent, with or without clinical signs.

Collection centre

means a facility approved by the Veterinary Authority for the collection of embryos/ova and used exclusively for donor animals which meet the conditions of the Terrestrial Code.

Commodity

means live animals, products of animal origin, animal genetic material, biological products and pathological material.

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 purpose of international trade.

Competent authority

means the Veterinary Authority or other Governmental Authority of a Member Country 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 in the OIE Aquatic Animal Health Code in the whole territory.

Container

means a non-self-propelled receptacle or other rigid structure for holding animals during a journey by one or several means of transport.

Containment zone

means a defined zone around and including suspected or infected establishments, taking into account the epidemiological factors and results of investigations, where control measures to prevent the spread of the infection are applied.

Day-old birds

means birds aged not more than 72 hours after hatching.

Death

means the irreversible loss of brain activity demonstrable by the loss of brain stem reflexes.

Disease

means the clinical or pathological manifestation of infection or infestation.

Disinfection

means the application, after thorough cleansing, of procedures intended to destroy the infectious or parasitic Agents of animal diseases, including zoonoses; this applies to premises, vehicles and different objects which may have been directly or indirectly contaminated.

Disinfestation

means the application of procedures intended to eliminate infestation.

Early detection system

means a system for the timely detection and identification of an incursion or emergence of diseases/infections in a country, zone or compartment. An early detection system should be under the control of the Veterinary Services and should include the following characteristics:

- a) representative coverage of target animal populations by field services;
- b) ability to undertake effective disease investigation and reporting;
- c) access to laboratories capable of diagnosing and differentiating relevant diseases;
- d) a training programme for veterinarians, veterinary para-professionals, livestock owners/keepers and others involved in handling animals for detecting and reporting unusual animal health incidents;
- e) the legal obligation of private veterinarians to report to the Veterinary Authority;
- f) a national chain command.

Emerging disease

means a new occurrence in an animal of a disease, infection or infestation, causing a significant impact on animal or public health resulting from:

- a) a change of a known pathogenic agent or its spread to a new geographic area or species; or
- b) a previously unrecognised pathogenic agent or disease diagnosed for the first time.

Epidemiological unit

means a group of animals with a defined epidemiological relationship that share approximately the same likelihood of exposure to a pathogen. This may be because they share a common environment (e.g. animals in a pen), or because of common management practices. Usually, this is a herd or a flock. However, an epidemiological unit may also refer to groups such as animals belonging to residents of a village, or animals sharing a communal animal handling facility. The epidemiological relationship may differ from disease to disease, or even strain to strain of the pathogen.

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.

Eradication

means the elimination of a pathogenic agent from a country or zone.

Establishment

means the premises in which animals are kept.

Euthanasia

means the act of inducing death using a method that causes a rapid and irreversible loss of consciousness with minimum pain and distress to animal.

Exporting country

means a country from which commodities are sent to another country.

Feral animal

means an animal of a domesticated species that now lives without direct human supervision or control.

Flock

means a number of animals of one kind kept together under human control or a congregation of gregarious wild animals. For the purposes of the Terrestrial Code, a flock is usually regarded as an epidemiological unit.

Free compartment

means a compartment in which the absence of the animal pathogen causing the disease under consideration has been demonstrated by all requirements specified in the Terrestrial Code for free status being met.

Free zone

means a zone in which the absence of the disease under consideration has been demonstrated by the requirements specified in the Terrestrial Code for free status being met. Within the zone and at its borders, appropriate official veterinary control is effectively applied for animals and animal products, and their transportation.

Fresh meat

means meat that has not been subjected to any treatment irreversibly modifying its organoleptic and physicochemical characteristics. This includes frozen meat, chilled meat, minced meat and mechanically recovered meat.

Good manufacturing practice

means a production and testing practice recognised by the Competent Authority to ensure the quality of a product.

Greaves

means the protein-containing residue obtained after the partial separation of fat and water during the process of rendering.

Hatching eggs

means fertilised bird eggs, suitable for incubation and hatching.

Hazard

means a biological, chemical or physical agent in, or a condition of, an animal or animal product with the potential to cause an adverse health effect.

Headquarters

means the Permanent Secretariat of the World Organisation for Animal Health located at:

12, rue de Prony, 75017 Paris, FRANCE

Telephone: 33-(0)1 44 15 18 88 Fax: 33-(0)1 42 67 09 87

Electronic mail: oe@oie.int

Website: <http://www.oie.int>

Herd

means a number of animals of one kind kept together under human control or a congregation of gregarious wild animals. For the purposes of the Terrestrial Code, a herd is usually regarded as an epidemiological unit.

Importing country

means a country that is the final destination to which commodities are sent.

Incidence

means the number of new cases or outbreaks of a disease that occur in a population at risk in a particular geographical area within a defined time interval.

Incubation period

means the longest period which elapses between the introduction of the pathogen into the animal and the occurrence of the first clinical signs of the disease.

Infected zone

means a zone in which a disease has been diagnosed.

Infection

means the entry and development or multiplication of an infectious agent in the body of humans or animals.

Infective period

means the longest period during which an affected animal can be a source of infection.

Infestation

means the external invasion or colonisation of animals or their immediate surroundings by arthropods, which may cause disease or are potential vectors of infectious agents.

International trade

means importation, exportation and transit of commodities.

International veterinary certificate

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

Journey

An animal transport journey commences when the first animal is loaded onto a vehicle/vessel or into a container and ends when the last animal is unloaded, and includes any stationary resting/holding periods. The same animals do not commence a new journey until after a suitable period for rest and recuperation, with adequate feed and water.

Killing

means any procedure which causes the death of an animal.

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.

Lairage

means pens, yards and other holding areas used for accommodating animals in order to give them necessary attention (such as water, feed, rest) before they are moved on or used for specific purposes including slaughter.

Listed disease

means a disease, infection or infestation listed in Article 1.2.3. after adoption by the World Assembly of OIE Delegates.

Loading/unloading

Loading means the procedure of moving animals onto a vehicle/vessel or into a container for transport purposes, while unloading means the procedure of moving animals off a vehicle/vessel or out of a container.

Market

means a place where animals are assembled for the purpose of trade or sale.

Meat

means all edible parts of an animal.

Meat-and-bone meal

means the solid protein products obtained when animal tissues are rendered, and includes any intermediate protein product other than peptides of a molecular weight less than 10,000 daltons and amino-acids.

Meat products

means meat that has been subjected to a treatment irreversibly modifying its organoleptic and physicochemical characteristics.

Milk

means the normal mammary secretion of milking animals obtained from one or more milkings without either addition to it or extraction from it.

Milk product

means the product obtained by any processing of milk.

Monitoring

means the intermittent performance and analysis of routine measurements and observations, aimed at detecting changes in the environment or health status of a population.

Notifiable disease

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

Notification

means the procedure by which:

- a) the Veterinary Authority informs the Headquarters,
- b) the Headquarters inform the Veterinary Authority,

of the occurrence of an outbreak of disease or infection in accordance with Chapter 1.1.

Official control programme

means a programme which is approved, and managed or supervised by the Veterinary Authority of a Member Country for the purpose of controlling a vector, pathogen or disease by specific measures applied throughout that Member Country, or within a zone or compartment of that Member 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 accordance with Chapters 5.1. and 5.2.

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.

Outbreak

means the occurrence of one or more cases in an epidemiological unit.

Owned dog

means a dog for which a person claims responsibility.

Pathological material

means samples obtained from live or dead animals, containing or suspected of containing infectious or parasitic agents, to be sent to a laboratory.

Place of shipment

means the place where the commodities are loaded into the vehicle or handed to the agency that will transport them to another country.

Population

means a group of units sharing a common defined characteristic.

Post-journey period

means the period between unloading and either recovery from the effects of the journey or slaughter (if this occurs before recovery).

Poultry

means all domesticated birds, including backyard poultry, used for the production of meat or eggs for consumption, for the production of other commercial products, for restocking supplies of game, or for breeding these categories of birds, as well as fighting cocks used for any purpose. Birds that are kept in captivity for any reason other than those reasons referred to in the preceding paragraph, including those that are kept for shows, races, exhibitions, competitions or for breeding or selling these categories of birds as well as pet birds, are not considered to be poultry.

Pre-journey period

means the period during which animals are identified, and often assembled for the purpose of loading them.

Prevalence

means the total number of cases or outbreaks of a disease that are present in a population at risk, in a particular geographical area, at one specified time or during a given period.

Protection zone

means a zone established to protect the health status of animals in a free country or free zone, from those in a country or zone of a different animal health status, using measures based on the epidemiology of the disease under consideration to prevent

spread of the causative pathogenic agent into a free country or free zone. These measures may include, but are not limited to, vaccination, movement control and an intensified degree of surveillance.

Qualitative risk assessment

means an assessment where the outputs on the likelihood of the outcome or the magnitude of the consequences are expressed in qualitative terms such as 'high', 'medium', 'low' or 'negligible'.

Quality

is defined by International Standard ISO 8402 as 'the totality of characteristics of an entity that bear on its ability to satisfy stated and implied needs'.

Quantitative risk assessment

means an assessment where the outputs of the risk assessment are expressed numerically.

Quarantine station

means an establishment under the control of the Veterinary Authority where animals are maintained in isolation with no direct or indirect contact with other animals, to ensure that there is no transmission of specified pathogen(s) outside the establishment while the animals are undergoing observation for a specified length of time and, if appropriate, testing and treatment.

Registration

is the action by which information on animals (such as identification, animal health, movement, certification, epidemiology, establishments) is collected, recorded, securely stored and made appropriately accessible and able to be utilised by the Competent Authority.

Responsible dog ownership

means the situation whereby a person (as defined above) accepts and commits to perform various duties in accordance with the legislation in place and focused on the satisfaction of the behavioural, environmental and physical needs of a dog and to the prevention of risks (aggression, disease transmission or injuries) that the dog may pose to the community, other animals or the environment.

Resting point

means a place where the journey is interrupted to rest, feed or water the animals; the animals may remain in the vehicle/vessel or container, or be unloaded for these purposes.

Restraint

means the application to an animal of any procedure designed to restrict its movements.

Risk

means the likelihood of the occurrence and the likely magnitude of the biological and economic consequences of an adverse event or effect to animal or human health.

Risk analysis

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

Risk assessment

means the evaluation of the likelihood and the biological and economic consequences of entry, establishment and spread of a hazard.

Risk communication

is the interactive transmission and exchange of information and opinions throughout the risk analysis process concerning risk, risk-related factors and risk perceptions among risk assessors, risk managers, risk communicators, the general public and other interested parties.

Risk management

means the process of identifying, selecting and implementing measures that can be applied to reduce the level of risk.

Safe commodity

means a commodity which can be traded without the need for risk mitigation measures specifically directed against

a particular listed disease, infection or infestation and regardless of the status of the country or zone of origin for that disease, infection or infestation.

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 Member Country from risks arising from the entry, establishment and/or spread of a hazard.

Slaughter

means any procedure which causes the death of an animal by bleeding.

Slaughterhouse/abattoir

means premises, including facilities for moving or lairaging animals, used for the slaughter of animals to produce animal products and approved by the Veterinary Services or other Competent Authority.

Space allowance

means the measure of the floor area and height allocated per individual or body weight of animals.

Specific surveillance

means the surveillance targeted to a specific disease or infection.

Stamping-out policy

means a policy designed to eliminate an outbreak by carrying out under the authority of the Veterinary Authority the following:

- a) the killing of the animals which are affected and those suspected of being affected in the herd and, where appropriate, those in other herds which have been exposed to infection by direct animal to animal contact, or by indirect contact with the causal pathogen; this includes all susceptible animals, vaccinated or unvaccinated, on infected establishments; animals should be killed in accordance with Chapter 7.6.;
- b) the destruction of their carcasses by rendering, burning or burial, or by any other method described in Chapter 4.12.;
- c) the cleansing and disinfection of establishments through procedures defined in Chapter 4.13.

Stocking density

means the number or body weight of animals per unit area on a vehicle/vessel or container.

Stray dog

means any dog not under direct control by a person or not prevented from roaming.
Types of stray dog:

- a) free-roaming owned dog not under direct control or restriction at a particular time,
- b) free-roaming dog with no owner,
- c) feral dog: domestic dog that has reverted to the wild state and is no longer directly dependent upon humans.

Stunning

means any mechanical, electrical, chemical or other procedure which causes immediate loss of consciousness; when used before slaughter, the loss of consciousness lasts until death from the slaughter process; in the absence of slaughter, the procedure would allow the animal to recover consciousness.

Subpopulation

means a distinct part of a population identifiable in accordance with specific common animal health characteristics.

Surveillance

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

Terrestrial code

means the OIE Terrestrial Animal Health Code.

Terrestrial manual

means the OIE Manual of Diagnostic Tests and Vaccines for Terrestrial Animals.

Transit country

means a country through which commodities destined for an importing country are transported or in which a stopover is made at a border post.

Transparency

means the comprehensive documentation of all data, information, assumptions, methods, results, discussion and conclusions used in the risk analysis. Conclusions should be supported by an objective and logical discussion and the document should be fully referenced.

Transport

means the procedures associated with the carrying of animals for commercial purposes from one location to another by any means.

Transporter

means the person licensed by the Competent Authority to transport animals.

Travel

means the movement of a vehicle/vessel or container carrying animals from one location to another.

Unit

means an individually identifiable element used to describe, for example, the members of a population or the elements selected when sampling; examples of units include individual animals, herds, flocks and apiaries.

Vaccination

means the successful immunisation of susceptible animals through the administration in accordance with the manufacturer's instructions and the Terrestrial Manual, where relevant, of a vaccine comprising antigens appropriate to the disease to be controlled.

Vector

means an insect or any living carrier that transports an infectious agent from an infected individual to a susceptible individual or its food or immediate surroundings. The organism may or may not pass through a development cycle within the vector.

Vehicle/vessel

means any means of conveyance including train, truck, aircraft or ship that is used for carrying animal(s).

Veterinarian

means a person with appropriate education, 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 a Member Country, 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 laws, regulations and all associated legal instruments that pertain to the veterinary domain.

Veterinary medicinal product

means any product with approved claim(s) to having a prophylactic, therapeutic or diagnostic effect or to alter physiological functions when administered or applied to an animal.

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 in accordance with 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 regulatory body for veterinarians and veterinary para-professionals.

Wild animal

means an animal that has a phenotype unaffected by human selection and lives independent of direct human supervision or control.

Wildlife

means feral animals, captive wild animals and wild animals.

Zone/region

means a clearly defined part of a territory containing an animal subpopulation with a distinct health status with respect to a specific disease for which required surveillance, control and biosecurity measures have been applied for the purpose of international trade.

Zoonosis

means any disease or infection which is naturally.

Appendix 3: Timetable of the mission; sites/ facilities visited and resource / contact persons met or interviewed

(Due to the large number of persons met and interviewed, it is not possible to provide complete “Lists of Attendance” for each meeting and only a limited number of persons are listed)

Assessors: Dr. H. Schneider = HS; Dr. H. Batho = HB; Dr. B. Stemshorn = BS; Dr. A. Thiermann = AT

24th October 2015

Arrival of OIE PVS Team members in Canberra

25th October 2015

Asses- sor(s)	Location & Jurisdiction	Institution – Agency – Group - Association	Resource / contact person (s)	POSITION	Activities and CC Relevance
Whole team	Canberra ACT	OIE PVS Team	John Stratton	Principal Veterinary Officer and OIE PVS Coordinator	Pre-mission discussion and program finalisation

26th October 2015

Opening meeting

Assessor(s)	Location & Jurisdiction	Institution – Agency – Group - Association	Resource / contact person (s)	POSITION	Activities and CC Relevance
Whole team	Canberra ACT	<u>Dept. Agriculture</u> Animal Health AUS OPENING MEETING	John Stratton Mark Schipp Robyn Martin Jackie South Wayne Terpstra Raelene Vivian Tony Callan Carol Sheridan Kathleen Plowman Duncan Rowland Kevin de Witte Wendy Townsend Jenny Firman Rupert Woods Dave Kahl Michelle Hyde	Principal Veterinary Officer and OIE PVS Coordinator Australian Chief Veterinary Officer (ACVO) Assistant Secretary Assistant Secretary Assistant Secretary First Assistant Secretary Director, Biosecurity Preparedness and Response Director, Animal Biosecurity CEO, Animal Health Australia (AHA) Executive Manager, Biosecurity Executive Manager, Market access support CVO, Act Govt. PMO. OHP Dept. Health CEO, Wildlife Health Australia Veterinary Student Project Officer,DAWR	Opening meeting Outline of the OIEPVS process; itinerary confirmation Overview of AUS VS

Assessor(s)	Location & Jurisdiction	Institution – Agency – Group - Association	Resource / contact person (s)	POSITION	Activities and CC Relevance
Whole team	Canberra ACT	Animal Health AUS AHPB / OCVO / CCEAD NLIS WHA (Wildlife Health AUS) Dept. of Health ACT govt. <i>On Shore Session</i>	Jennifer Davis Sam Hamilton Tony Callan Rupert Woods Jenny Firman Wendy Townsend Graeme Garner William Wong Duncan Rowland	Senior Veterinary Officer Director, ADPR Director, Biosecurity Preparedness and Response CEO, Wildlife Health Australia PMO. OHP Dept. Health CVO, Act Govt. Director, Epidemiology and One Health Program Animal Health Policy, DAWR Executive Manager, Biosecurity	Emergency Disease Response Disease control Internal coordination Surveillance Delegation Joint Programs Zoning External coordination Livestock Identification Wildlife diseases and Zoonoses
		<u>Dept. Agriculture</u> OIE/Codex Live Imports Biologicals imports Pre-border Cargo and mail clearance <i>Imports / Off Shore Session</i>	Michael Bond Mark Schipp John Stratton Carol Sheridan Allan Sheridan Jen Davis Sam Hamilton Sandy Cuthbert Wayne Terpstra Nick Harris Kiran Johar Ann Backhouse Helen Walker Tran Tang Peter Hewitt Amy Little Dave Kahl Michelle Hyde	Interim Inspector-General of Biosecurity ACVO Principal Veterinary Officer and OIE PVS Coordinator Director, ABB Director –VO, ABB Senior Veterinary Officer Director, ADPR Director, ABIAB Assistant Secretary Manager Regional Animal Biosecurity Director, Preborder Program Director, Codex Int. Standards Director, ABIAB Assistant Director, ABIAB Veterinary Officer, ABB Principal Veterinary Officer, ABIAB Veterinary Student Project Officer, DAWR	Imports Quarantine Border control Pre-border inspection Risk analysis Official representation Sanitary agreements Transparency

27th October 2015

Assessor(s)	Location & Jurisdiction	Institution – Agency – Group - Association	Resource / contact person (s)	POSITION	Activities and CC Relevance
Whole team	Canberra ACT	<u>Dept. Agriculture</u>	Mark Schipp John Stratton	ACVO Principal Veterinary Officer and OIE PVS Coordinator	Courtesy visit to Secretary of Agriculture
		<u>Dept. Agriculture</u> Meat program Dairy program Fish program Eggs program Animal Welfare <i>Exports Session</i>	Mark Schipp John Stratton Kate Fryer Sam Allan Carol Sheridan Allan Sheridan Jill Milan Shayne Daniels Karina Budd Amy Little Angela O’Sullivan Malcolm Fowler Rob Atkinson Michelle Hyde	ACVO Principal Veterinary Officer and OIE PVS Coordinator Veterinary Officer, Exports NVTM, Food Director, ABB Director VO, ABB Director, LAEB Director Dairy, Eggs and Fish Director, NRS Principal Veterinary Officer, ABIAB Director, APD/wool/dairy Assistant Director, Export Meat Veterinary Officer, Exports Project Officer, DAWR	Exports/ Live exports Export standards Certification Sanitary agreements Food safety Food product traceability Residues Animal welfare
		<u>Dept. Agriculture</u> <u>Dept. of Health</u> <i>Domestic Food Safety</i>	Mark Schipp John Stratton Holly Jones Mark Phythian Amanda Hill	ACVO Principal Veterinary Officer and OIE PVS Coordinator Director, Food and Nutrition Policy Section, Department of Health Director, Compliance Manager, Food Safety and Response, FSANZ	FSANZ (Food standards) Food regulations Domestic Food Safety External coordination

Assessor(s)	Location & Jurisdiction	Institution – Agency – Group - Association	Resource / contact person (s)	POSITION	Activities and CC Relevance
	Symonston ACT	APVMA – Australian Pesticides and Veterinary Medicines Authority Prof. Compounding Chemists Association <i>AVPMA session</i>	Mark Schipp John Stratton Linden Moffat Janine Glaser Alan Nordern Jason Lutz Chris Schyvens Warren Hough Karina Tyson Alex Lorry Noela Bull	ACVO PVO & OIE/PVS Coordinator Senior risk manager, Ethicals and Antibiotics, APVMA Environmental Assessment Coordinator, APVMA Executive Director, Registration Management and Evaluation, APVMA Director, Residues, APVMA Health Assessment Coordinator, APVMA Assistant Director, Sustainable Ag. Fish. Forestry. DAWR Director, Ethicals and Antibiotics, APVMA Head of Quality, BOVA Pharmacist Consultant, PCCA	Veterinary Medicines and biologicals control

28th October 2015

Assessor(s)	Location & Jurisdiction	Institution – Agency – Group - Association	Resource / contact person (s)	POSITION	Activities and CC Relevance
HS & AT	Canberra ACT <i>Corporate Session</i>	<u>ACT VS</u>	Wendy Townsend Stephen Hughes	Chief Veterinary Officer Biosecurity Senior Manager	VS functions and outputs
		<u>Dept. Agriculture C Biosecurity/ Communication</u>	John Stratton Sharne Gibbons Deb Langford Amanda Macdonald Jadd Sanson-Fisher Rhyll Vallis	PVO & OIE/PVS Coordinator Assistant Director Biosecurity Communication Biosecurity Policy Response Biosecurity Implementation Principal Government Lawyer Snr Policy Officer	Communication Legislation
HB & BS	Canberra ACT	<u>Dept. Agriculture Finance department</u>	Ian West Carol Sheridan Carmen Plovanic Jason Lucas Marina Prsa	Business support Director, ABB Business Support, OCVO Finance and Business support Business support	Finances
		<u>Human Resources, Learning & Development</u>	Amelia Haddock Carol Sheridan Con Goletsos	People services Director, ABB Corporate Strategy and Governance	Human resources CE & Performance management
Whole team	Canberra ACT	<u>Animal Health AUS</u>	Kathy Gibson Kathleen Plowman Duncan Rowland Brendan Pollard Peter Dagg Robert Barwell Francette Geraghty-Dusan Megan Wylie Lorna Citer Ian Langstaff Annette Brown Kevin de Witte	Manager, Training Services AHA CEO Executive Manager Biosecurity Veterinary Officer Executive Manager EAD Biosecurity Officer Vet. Officer, AUSTVETPLAN Project Officer Manager, Endemic Disease Manager Disease Surveillance Biosecurity RDE Coordinator Executive Manager Market Access Support	AUS VS National data bases
		<u>DAWR</u>	Mark Schipp John Stratton	ACVO PVO & OIE/PVS Coordinator	

Whole team	Canberra ACT	AHA Industry Forum Industry stakeholders SAFEMEAT Live export industry	Industry representatives Mark Schipp Joy Poole Steve Bailey Duncan Bruce-Smith Willie Rijnbeek Brendan Pollard John Stratton Ben Gardiner Stephen Doughty James Battams Robin Condron Bridget Peachey Kevin Shiell David Basham Peter Milne Heidi Reid Kathleen Plowman	Kathy Gibson David Basham AHA Industry Forum members Peter Bailey John Langbridge ACVO Chairman, Australian Horse Industry Council Chair, Safemeat executive Secretariat, Goat Industry Council Post Farm Gate, AMIC Veterinary Officer, AHA PVO & OIE/PVS Coordinator Rep, CCA Manager, NLIS Ltd Policy Analyst, Australian Pork Manager, Animal Health and Welfare, Dairy Australia Manager, Policy and Projects, Australian Lot Feeders Assn. Industry Forum Chair, Australian Dairy Framers Ltd. Chair, Animal Health and Welfare, Australian Dairy Farmers Ltd. Chair, AHA Manager, Policy and Projects CEO, AHA	Communication Consultation Joint programs
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FIELD VISITS

OIETEAM 1: Dr. H. Schneider = HS and Dr. A. Thiermann = AT.

Accompanied by Dr John Stratton (Australian counterpart).

Unless stated otherwise, the Team undertook the evaluations together

28th October 2015

(18:00 travel by car from Canberra to Goulburn)

29th October 2015

Assessor(s)	Location & Jurisdiction	Institution – Agency – Group - Association	Resource / contact person (s)	POSITION	Activities and CC Relevance
HS & AT	Goulburn NSW	'Big Merino' history of wool industry in Australia	Amanda Lee Michelle Hyde	DPI Poultry coordinator DAWR	AUS Agriculture
		Aviagen Australia	Bill Johnson Abbey Mathew Michael Leahy Amanda Lee Michelle Hyde	District Vet Technical Specialist, Aviagen, ANZ AANZ Managing Director, Aviagen DPI Poultry coordinator DAWR	Biologicals
	Binda NSW (by car)	"Cadfor " Murray Grey Stud	Rod Hoare Helena Warren Bill Johnson Michelle Hyde	Farmer, Veterinarian Farmer, Agricultural Scientist District Vet DAWR	Animal health in general

(15:30 travel by car from Binda to Orange)

30th October 2015

Assessor(s)	Location & Jurisdiction	Institution – Agency – Group - Association	Resource / contact person (s)	POSITION	Activities and CC Relevance
HS & AT	Orange NSW	Dept of Primary Industries (DPI) Local Land Services (LLS)	Ian Roth Therese Wright Bronwyn Hendry Elizabeth Braddon Shaun Slattery Barry Kay Peter Worsley Amanda Paul Peter Sparkes Peter Day	NSW CVO Manager, Biosecurity and Food Safety Leader, Animal Biosecurity Standards Team Leader, Animal Biosecurity and Welfare North West LLS Director Emergency Ops and Intelligence Project Officer, Surveillance Policy Officer, Animal Welfare Tablelands LLS Director, Compliance, NSW Food Safety Authority	Livestock inspection Livestock ID Biosecurity Animal Welfare Emergency response
	Carcoar NSW	Central Tablelands Livestock Exchange	Brock Syphers Bruce Watt Tim Seears	CTLX Supervisor LLS veterinarian, Bathurst LLS veterinarian, Orange	Surveillance Disease Control Emergency Preparedness
	Blayney NSW	Private Veterinary Hospital – mixed practice	Ruth and Howard Thompson	Private Veterinarians	Private veterinary services

31st October 2015

Assessor(s)	Location & Jurisdiction	Institution – Agency – Group - Association	Resource / contact person (s)	POSITION	Activities and CC Relevance
HS & AT	Katoomba NSW				Travel day Report discussion

1st November 2015

(16:00 travel by car to Camden)

Assessor(s)	Location & Jurisdiction	Institution – Agency – Group - Association	Resource / contact person (s)	POSITION	Activities and CC Relevance
HS & AT	Camden NSW	Dept. Primary Industries	Bruce Christie Ian Roth Graham Wilson Robyn Alders Richard Wittington Jef Hammond Melinda Gabor Peter Kirkland	DPI Biosecurity and Animal Welfare DPI Biosecurity and Animal Welfare LLS MBES Western Sydney University Sydney University Elizabeth Macarthur Agricultural Institute (EMAI) EMAI EMAI	VS and Animal Health Stakeholder consultation

2nd November 2015

Assessor(s)	Location & Jurisdiction	Institution – Agency – Group - Association	Resource / contact person (s)	POSITION	Activities and CC Relevance
HS & AT	Camden NSW	Elizabeth Macarthur Agricultural Institute	Jef Hammond Peter Kirkland Ian Roth Maria Hardy Melinda Gabor Greg Scott	Director EMAI Director EMAI Head of Virology NSW CVO EMAI Technical Manager Pathologist Research Scientist	Laboratories/ Stakeholder consultation
		Sydney University	Christina Dart Tony Mogg Katrina Bosward Siobhan Mor Gary Muscatello	Assoc. Professor Equine medicine Zoonoses and Infectious diseases Food safety/Epidemiology Assoc. Dean Undergraduate Program	VS and Animal Health
	Eastern Creek	Eastern Creek Quarantine Station	Kate Makin Juanita McMillan Jill Arthur	Principal Vet Officer Facility Manager Senior Vet Officer	Quarantine live animals and genetic material

(19:00 – 19:35 Flight VA 981 to Brisbane)

3rd November 2015

Assessor(s)	Location & Jurisdiction	Institution – Agency – Group - Association	Resource / contact person (s)	POSITION	Activities and CC Relevance
HS & AT	Brisbane QLD	QLD Dept of Agriculture and Fisheries	Allison Crook Nina Kung Dr Beth Woods Dr Jim Thompson Dr Ashley Bunce Dr Mark Cozens Valerie Mustafay	Chief Veterinary Officer Principal Veterinary Epidemiologist Deputy Director-General Chief Biosecurity Officer Director, Animal Biosecurity and Welfare Biosecurity Preparedness Program (FMD) Qld Registrar	VS Queensland
		QLD Veterinary Board teleconference	Valerie Mustafay Louisa King John Bagaley Anthony Polinelli Phil Andrews Sue Godkin	Registrars: Qld (on site) Vic (teleconference-TC) NSW (TC) ACT (TC) ACT (TC) WA (TC)	Vet Statutory Body
		Koala Hospital, Moggill	Rebecca Larkin	Veterinarian	Wildlife health
		PROVET	Alison Delbridge Tanya Read Rebecca Walker Nina Kung	Purchasing Manager Accounts Manager Environmental Health Officer, Netro North Public Health Unit Principal Epidemiologist	Veterinary medicines distribution and supply

Assessor(s)	Location & Jurisdiction	Institution – Agency – Group - Association	Resource / contact person (s)	POSITION	Activities and CC Relevance
	Coopers Plains	Veterinary Laboratory	William Wong Scott Craig Stephen Were Louise Jackson	Animal Health Policy DAWR Scientist, Leptospirosis OIE/WHO laboratory Principal chemist, Residue Laboratory Manager, Biosecurity Sciences Laboratory	Laboratories External coordination
		Tick Fever Centre	Phil Carter Peter Rolls	Acting Manager Acting Principal Veterinary Officer	Disease control/ Veterinary Drugs and Biologicals
		Official dinner	Michael O'Donahue Laurie Dowling Jim Thompson Andrew Wilson Glen Coleman Allison Crook Valerie Mustafay	AVA President Qld branch AVA Exec Officer Chief Biosecurity Officer Chief Scientist, Safefood Production Qld Dean, UQ vet school Qld CVO Queensland Vet Board Registrar	

4th November 2015

Assessor(s)	Location & Jurisdiction	Institution – Agency – Group - Association	Resource / contact person (s)	POSITION	Activities and CC Relevance
HS & AT	Beaudesert	Beef cattle farm	Nick Cameron Bomber Lancaster Malcolm MacLeod	Farm Manager Toowoomba Regional Veterinarians	Communications Consultation
	Silverdale	Livestock sale yard	Perry Jones	District biosecurity inspector, QDAF	ID & Movement control
	Aratula	Tick Cleaning facility	Robert Pellagreen	Manager	Animal health
	Gatton	Vet Faculty & clinics	Prof Glen Coleman	Dean of Veterinary School	Veterinary capacity
	Gatton	BBQ dinner	Wide range of BQ staff and university veterinary staff		Consultation

5th November 2015

Assessor(s)	Location & Jurisdiction	Institution – Agency – Group - Association	Resource / contact person (s)	POSITION	Activities and CC Relevance
HS & AT	Cannon Hill	'Australian Country Choice' abattoir	Sam Allen Alison Crook Nina Kung Chinniah Arungiri Peter Milzewski Anthony Milzewski	National Veterinary Technical Manager Queensland Chief Veterinary Officer Principal Veterinary Epidemiologist Area Technical Manager DAWR CEO, Australian Country Choice Abattoir General Manager, Australian Country Choice Abattoir	Food safety & integrated food business

(11:50 – 15:25 Flight QF 836 to Darwin)

Assessor(s)	Location & Jurisdiction	Institution – Agency – Group - Association	Resource / contact person (s)	POSITION	Activities and CC Relevance
HS & AT	Darwin NT	NT Dept of Primary Industries and Fisheries	Malcolm Anderson Elizabeth Stedman Ayrial Harburn David Frost Thomas Haines Caitlin Holley Beth Cookson Lorna Melville Mark Ford	Chief Veterinary Officer Veterinary Officer Veterinary Officer Senior Meat Industries Officer Livestock Biosecurity Officer, Tennant Creek Veterinary Officer, Live Exports, DAWR North Australian Quarantine Strategy (NAQS), DAWR Manager, Berrimah Veterinary Laboratory Indigenous Pastoral Program Coordinator	NT VS

6th November 2015

Assessor(s)	Location & Jurisdiction	Institution – Agency – Group - Association	Resource / contact person (s)	POSITION	Activities and CC Relevance
HS & AT	Darwin NT	Noonamah Livestock Export Approved Premises	Caitlin Holley Cameron Jenkins Lee Eastment	Veterinary Officer, Live Exports, DAWR Operations manager Yard Manager	
		Darwin International Sea Port, export cattle loading	Caitlin Holley Nick Vincent Darren Brown	Veterinary Officer, Live Exports, DAWR Animal Welfare Officer Accredited Stockman	Export / animal welfare
		Official dinner	Malcolm Anderson David Frost Thomas Haines Caitlin Holley Beth Cookson Lorna Melville Sue Fitzpatrick Mark Ford Markus Rathsmus	Chief Veterinary Officer Senior Meat Industries Officer Livestock Biosecurity Officer, Tennant Creek Veterinary Officer, Live Exports, DAWR North Australian Quarantine Strategy, DAWR Manager, Berrimah Veterinary Laboratory Principal Veterinary Officer Indigenous Pastoral Program Coordinator Northern Territory Cattleman's Association Executive	General discussion

7th November 2015

Assessor(s)	Location & Jurisdiction	Institution – Agency – Group - Association	Resource / contact person (s)	POSITION	Activities and CC Relevance
HS & AT	La Belle, NT	La Belle Cattle station	Malcolm Anderson John Stafford	Chief Veterinary Officer AACo Property	Stakeholder

8th November 2015

Asses- sor(s)	Location & Jurisdiction	Institution – Agency – Group - Association	Resource / contact person (s)	POSITION	Activities and CC Relevance
<i>HS & AT</i>	Beatrice Hill NT	NT DPI, buffalo research and NAMP sentinel sites	Malcolm Anderson Barry Lumke	Chief Veterinary Officer Research Station Manager	Animal health

9th November 2015

Asses- sor(s)	Location & Jurisdiction	Institution – Agency – Group - Association	Resource / contact person (s)	POSITION	Activities and CC Relevance
<i>HS & AT</i>	Crocodylus crocodile farm NT	Crocodile farming	Malcolm Anderson Vicki Simlesa Charlie Manolis	Chief Veterinary Officer DPIF crocodile expert Crocodylus technical advisor	Animal health

(13:35 – 19:35 Flight VA 1354 to Sydney)

FIELD VISITS

OIETEAM 2: Dr. H. Batho = HB and Dr. B. Stemshorn = BS.

Accompanied by Dr. Carol Sheridan (Australian counterpart).

Unless stated otherwise, the Team undertook the evaluations together

28th October 2015

(19:10 – 20:45 Flight QF 719 from Canberra to Perth)

29th October 2015

Assessor(s)	Location & Jurisdiction	Institution – Agency – Group - Association	Resource / contact person (s)	POSITION	Activities and CC Relevance
HB & BS	South Perth WA	Dept of Agric and Fisheries	Michelle Rodan Mia Carbon Marion Seymour Peter Gray Bob Vassallo Michael Paton Suzy Norton Jamie Finklestein	Chief Veterinary Officer Deputy Chief Veterinary Officer Manager, Animal Health Surveillance and Diagnostics Manager, Animal Product Integrity Manager, Animal Disease Control Senior Veterinary Officer Client engagement Advisor Veterinary Officer	WA VS
	Bunbury WA	Landmark	Scott Crombie Rod Francis Darren Chatley Kevin Hepworth Jamie Finkelstein	Farm supplies Farm supplies manager Manager Veterinary Officer Veterinary Officer	
		Vet Regional Office	Bob Vassallo Peter Gray Katie Webb Tom Hollingsworth Kevin Hepworth Beth Green Anita James Kerry Barrett Jamie Finklestein	Manager, Animal, Disease control Manager, Animal Product Integrity Veterinary Officer Veterinary Officer Veterinary Officer Technical Officer Technical Officer Stock Brands Officer Veterinary Officer	Biosecurity

Assessor(s)	Location & Jurisdiction	Institution – Agency – Group - Association	Resource / contact person (s)	POSITION	Activities and CC Relevance
		Private veterinarians	Peter Rosher & Ian Bradshaw Paul Repton Sam Wright Bob Vassallo Peter Gray Katie Webb Tom Hollingsworth Kevin Hepworth Jamie Finkelstein	Cattle Veterinary Services Geovet Manjimup Veterinary Services Manager, Animal Disease Control DAFWA Manager, Animal Product Integrity Veterinary Officer, DAFWA Veterinary Officer, DAFWA Veterinary Officer, DAFWA Veterinary Officer, DAFWA	Accreditation etc

30th October 2015

Assessor(s)	Location & Jurisdiction	Institution – Agency – Group - Association	Resource / contact person (s)	POSITION	Activities and CC Relevance
HB & BS	WA	'Weston Milling'	Quentin Richards Greg Friedrichs Elaine Barrett Peter Gray Tom Hollingsworth Jamie Finklestein	Technical and Compliance Coordinator Commercial Manager Production Manager Manager, Animal Product Integrity Veterinary Officer, DAFWA Veterinary Officer, DAFWA	Animal feed
	Fremantle	'Wellard La Bergerie' feedlot	Harold Sealy Tim O'Donnell Paul Gault Karen Ivey Jamie Finkelstein	General Manager Operations Manager Feedlot Manager Veterinary Officer, DAWR Veterinary Officer, DAFWA	Disease control
	Fremantle Sea Port	Dept of Agric Customs	Coralie Heath	Team Leader	Import / Export

31st October 2015

Assessor(s)	Location & Jurisdiction	Institution – Agency – Group - Association	Resource / contact person (s)	POSITION	Activities and CC Relevance
HB & BS	Perth	Animal product retail			Food safety

OIETEAM 2a: Dr B. Stemshorn = BS.
Accompanied by Michelle Hyde, DAWR (Australian counterpart)

31st October 2015

(12:55 – 18:55 Flight QF 592 to Adelaide)

1st November 2015

Assessor(s)	Location & Jurisdiction	Institution – Agency – Group - Association	Resource / contact person (s)	POSITION	Activities and CC Relevance
BS	Adelaide				Report writing

2nd November 2015

Assessor(s)	Location & Jurisdiction	Institution – Agency – Group - Association	Resource / contact person (s)	POSITION	Activities and CC Relevance
BS	Adelaide	Primary Industries and Regions SA (Pirsa)	Roger Paskin Jack Van Wijk Cleopas Bamhare Mary Carr Tim Woorton Mark Langman Nancy Bombardieri Geoff Raven Margaret Sexton Celia Dickason Mark Peters Sue Fitzsimons Michelle Hyde	Chief Veterinary Officer Manager Technical & Audit Manager Disease Surveillance and Trade Veterinarian Manager NLIS Manager Compliance Emergency Management Manager Plant and Food standards Veterinarian Veterinarian Animal Welfare Advisor Diagnostic Service Manager DAWR	SA VS – Surveillance and disease control NLIS Food Safety Emergency Management Animal Welfare

Assessor(s)	Location & Jurisdiction	Institution – Agency – Group - Association	Resource / contact person (s)	POSITION	Activities and CC Relevance
		Vet Services SA	Wayne Mossop Chris van Dissel Mary Carr Elise Matthews Celia Dickason Michelle Hyde	Animal Health Advisor, Biosecurity SA Animal Health Advisor, PIRSA Veterinarian Veterinary Officer, PIRSA Snr Vet Officer, Biosecurity SA DAWR	

3rd November 2015

Assessor(s)	Location & Jurisdiction	Institution – Agency – Group - Association	Resource / contact person (s)	POSITION	Activities and CC Relevance
BS	Adelaide	'Gourmet Chicken' abattoir	Jim Kotoros Derene Szezerba Margaret Sexton Jeff Blackmore Emma Wenzel Michelle Hyde	Owner Food Standards Officer Technical Manager Poultry Food Production Farming Manager QA Manager DAWR	Food safety
	Murray Bridge	District Vet Office	Jack Van Wijk Jeremy Rogers James Vowles Michelle Hyde	Manager Animal Health Operations District Veterinary Officer Practice Owner DAWR	Animal health
		Private veterinarian	James Vowles		Accreditation

(18:05 – 19:50 Flight QF 694 to Melbourne)

OIETEAM 2b: Dr H. Batho= HB
Accompanied by Dr. Carol Sheridan (Australian counterpart).

31st October 2015

(12:55 – 18:55 Flight QF 476 to Melbourne) - Overnight

1st November 2015

(09:05 – 10:15 Flight QF 2281 to Launceston)

Assessor(s)	Location & Jurisdiction	Institution – Agency – Group - Association	Resource / contact person (s)	POSITION	Activities and CC Relevance
HB	Launceston TAS				Report writing

2nd November 2015

Assessor(s)	Location & Jurisdiction	Institution – Agency – Group - Association	Resource / contact person (s)	POSITION	Activities and CC Relevance
HB	Launceston	Mt Pleasant Animal Health Laboratory	Rod Andrewartha MaryLou Conway William Rootes Andrea Clark Bruce Jackson	Chief Veterinary Officer Deputy Chief Veterinary Officer Monitoring and Auditing Registrar, Animal Brands Program Manager, Animal Biosecurity & Product Integrity	TAS VS – Surveillance and disease control Food Safety
	Cressy	DFTD Research	Annie Phillips Darren Page	Wildlife Veterinarian, Natural Cultural Heritage division Utility Officer (keeper), Natural Cultural Heritage division	Wildlife health
	Launceston	<i>'Broomby's Piggery'</i>	Lynette Broomby Sue Martin Mary Lou Conway	Owner/partner, Winkleigh Farm Veterinary Officer Deputy Chief Veterinary Officer	Disease control
		Tasmanian Farmers and Graziers Association	Rupert Gregg	TFGA representative SCA/Meat Council	

3rd November 2015

Assessor(s)	Location & Jurisdiction	Institution – Agency – Group - Association	Resource / contact person (s)	POSITION	Activities and CC Relevance
BS	Cressy	Tier 1 abattoir	Brian Oliver Chris Cocker Neville Price Rowena Bell Mary Lou Conway	Managing Director Development and Environment Manager Food Safety Auditor, DPIPWE Veterinary officer, animal biosecurity and welfare Deputy Chief Veterinary Officer	Food safety
	Perth	'Tasmanian Honey Company'	Julian Wolfhagen	General Manager	Biosecurity
	Launceston	Mt Pleasant office	David Moore Bruce Jackson Neville Price Rowena Bell Mary Lou Conway	Biosecurity officer Program manager, animal biosecurity and product integrity Food safety auditor Veterinary officer, animal biosecurity and welfare Deputy Chief Veterinary Officer	
		Animal Health Laboratory	Jim Lentern Jim Taylor Graeme Knowles Mary Lou Conway	A/g Manager Principal pathologist Veterinary pathologist Deputy Chief Veterinary Officer	
	Launceston	Airport			Import/Export

(17:15 – 18:30 Flight QF 2286 to Melbourne)

OIETEAM 2: Dr. H. Batho = HB and Dr. B. Stemshorn = BS.**Accompanied by Dr. Carol Sheridan (Australian counterpart).**

Unless stated otherwise, the Team undertook the evaluations together

4th November 2015

Assessor(s)	Location & Jurisdiction	Institution – Agency – Group - Association	Resource / contact person (s)	POSITION	Activities and CC Relevance
HB & BS	Melbourne Attwood	Victorian VS Offices	Charles Milne Cameron Bell Sally Salmon Malcolm Ramsay Jane Malcolm Grant Rawlin Julie Strous Tracey Bradley	Chief Veterinary Officer Manager, Veterinary Science Manager, Epidemiology and Risk Principal Veterinary Officer, EAD A/g Principal Policy Officer, Animal Welfare Research leader, veterinary pathobiology Executive Director, AVBC Principal Veterinary Officer, Aquatics	Veterinary services Animal welfare
		AVBC and Vet Board	Julie Strous Ros Nichol Tracey Bradley	Executive Director, AVBC President VIC Vet Board Principal Veterinary Officer, Aquatics	Veterinary licensing and registration
	Mickleham	Quarantine Station	Gaylene Podhajski John Russell-Cook Tracey Bradley	Director Veterinary Officer Principal Veterinary Officer, Aquatics	Import / Export
	Brooklyn	<i>'Brooklyn Meats'</i>	Jason Ollington Roy Subramaniam Aqa Tokhi Mark Kelly Shannon Hoehbe Hakon Smethurst Tracey Bradley	Field Operations Manager, DAWR Area Technical Manager, DAWR On-Plant Veterinarian, DAWR Plant manager Assistant FSQA Manager FSQA Manager Principal Veterinary Officer, Aquatics	Export abattoir

	Melbourne	Laverton	<p>David Ritchie Bianca Heaney</p> <p>Chris Wilcox</p> <p>Peter Morgan</p> <p>Tracey Bradley</p>	<p>General Manager Executive Manager, Australian wool Industries Secretariat</p> <p>Executive Director, National Council of Wool Selling Brokers</p> <p>Executive Director, Australian Council of Wool Exporters and Processors</p> <p>Principal Veterinary Officer, Aquatics</p>	
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5th November 2015

Assessor(s)	Location & Jurisdiction	Institution – Agency – Group - Association	Resource / contact person (s)	POSITION	Activities and CC Relevance
HB & BS	Parkville	ZOETIS Animal Health	Racquel Dowell Richard Abrehart Tracey Bradley	Quality Assurance Manager Bacterial Antigens Manager Principal Veterinary Officer, Aquatics	Vet pharmaceuticals
	Werribee	Veterinary Faculty	James Gilkerson Glenn Browning Liz Tudor Caroline Mansfield Chris Whitton Jenny Charles Amir Noormohammadi Marc Marenda Helen McGregor Natalie Courtman Tracey Bradley	Professor, Veterinary Microbiology (equine infectious disease) Professor, Director: Asia Pacific Centre for Animal Health. Associate Professor, A/Dean for Curriculum Associate Professor, Head of Small Animal medicine Associate Professor, Head of the Equine Centre Associate Professor, Veterinary Pathology Professor, Head of Pathology Dr, Clinical Microbiologist Dr, Production Animal Consultant. McKinnon Project. Dr, Clinical Pathologist Principal Veterinary Officer, Aquatics	Veterinary training
	Camperdown	'Total Livestock Genetics'	Ruth Barber Steve Williams Ponneelan Ganesan Amandeep Walia Tracey Bradley	Compliance Director Laboratory Manager Veterinary Officer, DAWR Principal Veterinary Officer, Aquatics	Animal health
		Knackery	David Preece Tracey Bradley	Manager Principal Veterinary Officer, Aquatics	Food safety

6th November 2015

Assessor(s)	Location & Jurisdiction	Institution – Agency – Group - Association	Resource / contact person (s)	POSITION	Activities and CC Relevance
HB & BS	Warrnambool	'Murray Goulburn' milk processor	Chris Evans Alison Lee Tracey Bradley	Factory Manager Principal Veterinary Officer, small ruminants Principal Veterinary Officer, Aquatics	Food safety
		Private veterinary clinic	Jon Kelly Stephen Jagoe David Beggs Tracey Bradley	Veterinarian and Director Veterinarian and Director Veterinarian Principal Veterinary Officer, Aquatics	Animal health and surveillance
		Dairy farm	Anthony Eccles David Beggs Stephen Jagoe Tracey Bradley	Owner Veterinarian and Director Veterinarian and Director Principal Veterinary Officer, Aquatics	Food safety

7th November 2015

Assessor(s)	Location & Jurisdiction	Institution – Agency – Group - Association	Resource / contact person (s)	POSITION	Activities and CC Relevance
HB & BS	Warrnambool	ACME Trading Company	Jack Farley Alison Lee Tracey Bradley	Part owner Principal Veterinary Officer, small ruminants Principal Veterinary Officer, Aquatics	Food safety
		Cheese retailer	Kim Cavanagh Alison Lee Tracey Bradley	Manager Principal Veterinary Officer, small ruminants Principal Veterinary Officer, Aquatics	
		Teleconference	Tony Britt Alison Lee Tracey Bradley	Manager, Major Projects Principal Veterinary Officer, Small Ruminants Principal Veterinary Officer, Aquatics	Traceability
		Dunkeld	Sheep farm	Matthew and Maria Crawford Tracey Bradley	Owners Principal Veterinary Officer, Aquatics

8th November 2015

Assessor(s)	Location & Jurisdiction	Institution – Agency – Group - Association	Resource / contact person (s)	POSITION	Activities and CC Relevance
HB & BS	Geelong				Report writing

9th November 2015

Assessor(s)	Location & Jurisdiction	Institution – Agency – Group - Association	Resource / contact person (s)	POSITION	Activities and CC Relevance
HB & BS	Geelong	Australian Animal Health Laboratory	Kim Halpin Mark Ford James Watson Axel Colling Debbie Eagles Frank Wong David Williams John Allen Sam McCulloch Zurt Zuelke Bernadette O'Keefe Nicole Bailey Renee Huggard Tracey Bradley	Veterinary Virologist Veterinarian Veterinary Investigation Leader Veterinarian Veterinary Epidemiologist Diagnostic Virologist (OIE focal point, AI) Diagnostic Virologist Veterinary Leader, Regional Program Research Director Director, AAHL QA Manager NATA Relations and Technical Coordinator Veterinary student Principal Veterinary Officer, Aquatics	Laboratory services
	Melbourne	International Airport	Malcolm Keen Kerryn Ward Caitlin Morrow Gary Cumming	A/g Director for Inspection Services Group Assistant Director, travellers – Inspections Services Group Operations Manager, travellers – Inspection Services Group Detector Dog Operations – Inspections Services Group	Import/Export

(18:00 – 19:35 Flight QF 458 to Sydney)

WHOLE OIE TEAM

10th to 12th November 2015

Asses- sor(s)	Location & Jurisdiction	Institution – Agency – Group - Association	Resource / contact person (s)	Position	Activities and CC Relevance
<i>Whole team</i>	Sydney NSW	OIEPVS Team			Evaluation findings and Report writing

13th November 2015

Closing meeting

Asses- sor(s)	Location & Jurisdiction	Institution – Agency – Group - Association	Resource / contact person (s)	POSITION	Activities and CC Relevance
<i>Whole team</i>	Sydney NSW	Animal Health Committee	Mark Schipp and members of the AHC	Australian CVO	Feedback on the OIE PVS Australia Evaluation Mission

TEAM departures

Map showing the travel plan of the OIE Teams and the visited sites.

Air Travel by the OIE PVS Teams in Australia

MAP 7: OIE TEAM 1: Dr. H. Schneider = HS and Dr. A. Thiermann = AT. Accompanied by Dr. John Stratton (Australian counterpart).

Sydney – Brisbane – Darwin – Sydney

OIE TEAM 2: Dr. H. Batho = HB and Dr. B. Stemshorn = BS. Accompanied by Dr. Carol Sheridan (Australian counterpart)

Canberra - Perth - Adelaide - Melbourne – Sydney

Canberra - Perth - Launceston – Melbourne - Sydney



Appendix 4: Air travel itinerary

+ = next day

++ = two days later

ASSESSOR	DATE	From	To	Flight No.	Departure	Arrival
BATHO Howard 2JK8ZM	22.10.15	Brussels	London	BA 399	1920	1930
		London	Sydney	B 15	2135	0605+
	23.10.15	Sydney	Canberra	QF 1513	0815	0910
	14.11.15	Sydney	London	BA 16	1630	0455+
		London	Brussels	BA 392	0855	1105

SCHNEIDER Herbert 2QAKZK	23.10.15	Windhoek	Johannesburg	SA 77	1610	1800
		Johannesburg	Perth	SA 280	2120	1220+
	24.10.15	Perth	Canberra	QF 718	1535	2225
	13.11.15	Sydney	Perth	QF 583	1930	2125
		Perth	Johannesburg	SA 281	2345	0430+
	14.11.15	Johannesburg	Windhoek	SA 74	0950	1145

STEMSHORN Barry 2PFH5Q	22.10.15	Ottawa	Vancouver	AC 189	1855	2118
		Vancouver	Sydney	AC 033	2340	0915++
	24.10.15	Sydney	Canberra	QF 1475	1215	1430
	14.11.15	Sydney	Vancouver	AC 034	1215	0725
		Vancouver	Ottawa	AC 166	0925	1703

THIERMANN Alex 2IZA9E	22.10.15	Paris	Dubai	QF 8076	2150	0630+
	23.10.15	Dubai	Sydney	QF 002	0915	0610+
	24.10.15	Sydney	Canberra	QF 1513	0815	0910
	15.11.15	Sydney	Dubai	QF 8415	0600	1320
	15.11.15	Dubai	Paris	QF 8075	1450	1930

Appendix 5: Documents used in the PVS evaluation

E: Pre-Mission

E = Electronic version

Ref	Title	Author / Date / ISBN / Web	Related critical competences
	PRE-MISSION DOCUMENTS		
E. 01	General Country Information		
E. 01.1	Australia States & Territories	http://www.about-australia.com/	PART II
E. 01.2	Australia: National Baseline Information document	Provided by the Office of the Australian CVO	
E. 01.2.1 to 8	Request Baseline Information Docs	OIE PVS Team	ALL Parts
E. 01.2.1.1	ACT Baseline Information Docs	Provided by Canberra VS	ALL Parts
E. 01.2.2.1	NSW Baseline Information Docs	Provided by New South Wales VS	ALL Parts
E. 01.2.3.1	NT Baseline Information Docs	Provided by North. Territory VS	ALL Parts
E. 01.2.4.1	QLD Baseline Information Docs	Provided by Queensland VS	ALL Parts
E. 01.2.5.1	SA Baseline Information Docs	Provided by South Australia VS	ALL Parts
E. 01.2.6.1-3	TAS Baseline Information Docs	Provided by Tasmania VS	ALL Parts
E. 01.2.7.1	VIC Baseline Information Docs	Provided by Victoria VS	ALL Parts
E. 01.2.8.1	WA Baseline Information Docs	Provided by Western Australia VS	ALL Parts
E. 01.3	Administration of the Imported Food Inspection Scheme	http://www.anao.gov.au/Publications/Audit-Reports/2014-2015/Administration-of-the-Imported-Food-Inspection-Scheme/Audit-summary#H2_Conclusion	PART III
E. 01.4	2012 Yearbook Australia	http://www.abs.gov.au/ausstats/abs@.nsf/mf/1301.0	PART II
E. 01.5	2012-13 Australian Food Statistics	http://www.agriculture.gov.au/ag-farm-food/food/publications/afs/food-stats-2012-13	PART II
E.02	Animal Health General & OIE		
E. 02.1	2013 OIE PVS Tool	www.oie.int	ALL PARTS
E. 02.2	2015 OIE TAHC Vol. I	www.oie.int	ALL PARTS
E. 02.3	2015 OIE TAHC Vol. II	www.oie.int	ALL PARTS
E. 03	Finances		
E. 03.1	2015-2016 Federal Agriculture Budget	http://www.agriculture.gov.au/about/budget/budget-2015-16	PART III- I.8-10

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2PP 8	NLIS Monitoring-C.pptx	Western Australia DoAF	11-2B
2PP 9	Animal Disease Surveillance in South Australia - PVS 2015.ppt	South Australia	II-5 A & B
2PP 10	10 MG Devondale dairy Nov 2015 compr.pptm	DEVONDALE DAIRY	II-8C
2PP 11	Diagnosis, Surveillance and Response Program (talk 2) James Watson - Overview of DSR activities.pdf	Geelong AAHL	II-1B, 11-5B
2PP 12	Overview of AAHLs responsibilities and designations Sam McCullough-.pdf	Geelong AAHL	II-1B
2PP 13	AAHLs Proficiency Testing Program 1pm (talk 3) Kim Halpin - .pdf	AAHL Geelong	II-2
2PP 14	LEADDR overview 1pm (talk 2) Kim Halpin - .pdf	AAHL Geelong	II-2
2PP 15	NATA overview 1pm (talk 1) Nicole Bailey -.pdf	NATA	II-2
2PP 16	Overview of AAHLs veterinary training activities 11am (talk 5) Kim Halpin -.pdf	AAHL Geelong	1-3
2PP 17	Overview of AAHLs overseas projects and international collaborations 11am (talk 4) John Allen -.pdf	AAHL Geelong	II-1B, 11-4
2PP 18	Overview of research activities 11am (talk 3) David Williams -.pdf	AAHL Geelong	11-1B

	M = Digital Memory stick / card		
M.1	Canberra Meetings	PowerPoint presentations	ALL PARTS
M.2	SAFEFood	Food Safety and FZANZ	PART III-II.8
M.3	NT Meetings	Surveillance and Live Exports - NAQS	PART III
M.4	VIC and SA: All PowerPoints	PowerPoint presentations	ALL PARTS
M.5	NSW PowerPoints and Info	Baseline Info	ALL PARTS
2M.1	Screening of International Mail.docx	AUDIT REPORT	II-4
2M.2	Administration of the Imported Food Inspection Scheme rev bws.docx	AUDIT REPORT	II-4
2M.3	List of Abattoirs	http://www.ausmeat.com.au . (accessed from 'AUS-MEAT accredited establishments link).	II-8A
2M.4	Administration of the Imported Food Inspection Scheme rev bws.docx		II-4
2M.5	Australian-standards-v2.3.doc	http://www.agriculture.gov.au/export/liv-e-animals/livestock/about/	II-4
2M.6	WA vets in VSB data.docx	Western Australia DoAF	I-i
2M.7	Camelids deer identification and movement.pdf	Western Australia DoAF	II-12A
2M.8	Cattle identification and movement.pdf	Western Australia DoAF	II-12A
2M.9	Horse identification.pdf	Western Australia DoAF	II-12A
2M.10	Livestock ID and owners registration guide.pdf	Western Australia DoAF	II-12A
2M.11	Pig identification and movement.pdf	Western Australia DoAF	II-12A
2M.12	Registered earmark index.pdf	Western Australia DoAF	II-12A
2M.13	Registering as an Owner of Livestock.pdf	Western Australia DoAF	II-12A
2M.14	Sheep and goats identification and movement.pdf	Western Australia DoAF	II-12A
2M.15	Australian Feed Standard for Food Producing Animals DRAFT.doc	DAFWA	II-11
2M.16	Livestock identification and movement.zip	Western Australia DoAF	II-12A
2M.17	VO Position Advertisement.pdf	Tasmania Department of Primary Industries, Parks, Water and Environment	I-1A
2M.18	VO Job Position description.pdf	Tasmania Department of Primary Industries, Parks, Water and Environment	I-1A
2M.19	Aus Poultry Standards.pdf	DAFWA	II-8A
2M.20	Draft Biosecurity Inspector (Investigations) Band 4 (2).doc	Tasmania Department of Primary Industries, Parks, Water and Environment	I-1B

2M 21	Standard for production and transport of meat.pdf	DAFWA	II-8A
2M 22	COMPOUNDED VETERINARY MEDICINES PCCA Submission for OIE Evaluation of the Performance of Veterinary Services.pdf	PCCA	II-9
2M 23	September 2015 monthly report.docx	RSPCA/ DPIPWE submitted Animal Welfare cases	II-13
2M 24	WA VSB regulatory action.pdf		II-9, III-5B
2M 25	Emergency Animal Disease Preparedness RD&E Strategy 2013-16 130320.pdf	Australian Wool Industry	II-6, III-6
2M 26	FAWO Introduction and Activities Booklet 2015 150826.pdf	Federation of Australian wool organisations	II-8C, III-6
2M 27	FAWO OIE delegation 4 Nov 15.pdf	Federation of Australian wool organisations (Australian Wool Innovation Ltd)	II-6
2M 28	VICTORIA VET PRACTICE ACT 97-58a024.pdf	Victoria	I.1A, IV-5B
2M 29	SA PIRSA CAG report Oct 2015 BJD.doc	PI&R, SA	II-7
2M 30	SA Disease investigation report – Willalooka Pastoral .pdf	PI&R, SA	II-5A, II-6
2M 31	SA Sudden death in sheep 4 3 15 .doc	PI&R, SA	II-5A, II-6
2M 32	AI Semen Centre Health Test Summary.pdf	Total Livestock Genetics	II-7
2M 33	AI semen centre SOP 17 - Contingency Plan for an Outbreak of an OIE-Notifiable Disease.pdf	Total Livestock Genetics	II-7
2M 34	AI Semen Centre Table of Contents for Bovine Semen Manual.pdf	Total Livestock Genetics	II-7
2M 35	AI semen cntre SOP 28 - BVD Sero-conversion at the SCC's.pdf	Total Livestock Genetics	II-7
2M 36	ZOETIS Vaccines list	ZOETIS	II-9
2M 37	LEADDR 2014 Annual Report FINAL.pdf	GEELONG	II-2
2M 38	National Animal Welfare Roundtable Outcomes Report 16 Oct 15.pdf	Sponsored by the AVA, the RSPCA and the NFF (DAWR)	II-13
2M 39	Overview follow up re NAHIS		II-6
2M 40	Draft National Standard for Animal Feed 08 August 2013.doc		II-11

	HARD Copy documents		
2H.1	Leaflet on carrying fruit, vegetables and bee products	Western Australia DoAF	ii-4
2H.2	Organochlorine Residue Management Notice, Residue Quarantine Notice & Property Management Plan	Western Australia DoAF Regional Office Bunbury	II-10
2H.3	Residue management notice and Property management plan	Western Australia DoAF Regional Office Bunbury	II-10
2H.4	Reportable disease notification process	Western Australia DoAF	II-6
2H.5	Transport & Movement: Identification and Document requirements	Western Australia DoAF	II-4
2H.6	Livestock biosecurity references (web-links)	Western Australia DoAF	II-4
2H.7	Policy – State AH and Property of Origin statements for animals destined for International Export	Western Australia DoAF	II-4
2H.8	Advice to Inspectors – Manufacture Inspection Form (feed mills)	Western Australia DoAF	II-11
2H.9	Guidelines for preventing contamination with restricted feed ingredients (feed mills)	Stock feed manufacturers' Council of Australia	II-11
2H.10 HLB	General Animal Disease surveillance plan (2015.16 v 1.2)	Department of Primary Industries, Parks, Water and Environment – Biosecurity Tasmania	II-5B
2H.11 HLB	Animal Biosecurity Programme Plan 2015-2016	Biosecurity Tasmania Division	II-5B
2H.12 HLB	Animal Welfare Programme Plan 2015-2016	Biosecurity Tasmania Division	II-13
2H.13	Certificate III in meat processing (meat safety)	Biosecurity Tasmania Division	I.2B, II-8B
2H.14	Tasmania Animal Health Laboratory	Biosecurity Tasmania Division	ii-1 A & B
2H.15	Devondale MGFARM SW VIC newsletter Bulk Milk Cell counts	Devondale Dairy	II-8C
2H 16	BIP inspection form and declaration card	Melbourne Airport	II-4

Appendix 6: Organisation of the OIE PVS evaluation of the VS of Australia

Assessors Team:

- Dr Herbert Schneider - Team leader
- Dr Howard Batho - Technical expert
- Dr Barry Stemshorn - Technical expert
- Dr Alex Thiermann - Technical expert

Accompanied by Drs C. Sheridan and J. Stratton

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: 26 October – 13 November 2015

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
- Inclusive / 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
- Research
- Initial and continuous training
- Organisation and finance
- Other to be determined...

Persons to be present: see Appendix 3

Sites to be visited: see Appendix 3

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:

- a verbal summary 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.

