



AEMIS Review Recommendations Report

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1.0 EXECUTIVE SUMMARY

Introduction

Australia's meat industry has a turnover of more than \$65 billion annually¹, producing over 2 million tonnes of meat and meat products, of which about 70 per cent² is exported to more than 100 countries. Australia is the largest sheep-meat exporter in the world and the third-largest exporter of beef and veal³. Our access to global markets depends on the disease-free status and safety of Australia's meat and meat products to fulfil importing country requirements.

Key to global market access is the Australian Export Meat Inspection System (AEMIS): "an integrated set of controls specified and verified by (the Australian) Government that ensures the safety, suitability and integrity of Australian meat and meat products destined for domestic and export markets"⁴. Regulated by the Australian Department of Agriculture (the department), this framework is critical to ensuring market access for Australia's meat and meat products, providing trading partners with assurance and certainty, and contributing to Australia's reputation for consistently safe, high quality meat. By modern regulatory principles, the system is successful when regulation is risk-based and real-time, and further enhanced when exporters have mature food safety cultures.

AEMIS also provides the platform that underpins the marketing of Australian meat to premium markets, which is increasingly important as global trade becomes more competitive and complex. In the future, it is critical that AEMIS is integrated into a transparent supply chain whose stakeholders collaborate for mutual industry benefit, harnessing data to improve its productivity and quality, protect biosecurity and engage markets confidently.

The AEMIS review

The Australian Government introduced AEMIS in October 2011, as part of the Export Certification Reform Package (ECRP). The system had been developed over several years, in consultation with the Australian meat industry. It includes registration and approved arrangements for export establishments; ante-mortem and post-mortem inspections; verification of food safety, integrity and compliance with importing country requirements; export certification; and performance-based audits.

The most significant reform was the introduction of Australian Government Authorised Officers (AAOs) – qualified private sector meat inspectors authorised to perform post-mortem inspections. The aim was to ensure compliance with importing country requirements, while giving businesses more flexibility in managing their day-to-day operations and achieving cost savings.

When AEMIS was introduced, the department and industry agreed it would be regularly reviewed to ensure it continued to deliver positive outcomes and productivity gains. This report presents the findings and recommendations of the first review. In summary, Palladium was tasked to:

- 1) determine the current efficiency, effectiveness and fitness-for-purpose of AEMIS
- 2) make recommendations about the future needs of the system to government and industry.

¹ Meat & Livestock Australia, Ernst & Young, September 2018, *State of the Industry Report 2018: The Australian Red Meat and Livestock Industry*

² Australian Pork Limited, 2019, *Import, Export and Domestic Production Report* (May 2019)

³ Meat & Livestock Australia, Ernst & Young, September 2018, *State of the Industry Report 2018*

⁴ Department of Agriculture, 2017, Australian Export Meat Inspection System Information Package

The review conducted consultations and desktop analysis to determine if AEMIS meets the following definitions, now and into the future:

- // **Efficient** – operating effectively in an organised and timely way, with tasks performed by the most appropriate stakeholder
- // **Cost-effective** – the minimum costs necessary to provide the activity for achieving the targeted outcome, with costs borne by the most appropriate stakeholder
- // **Fit-for-purpose** – well equipped or well suited for its designated role or purpose.

Palladium considered five pillars in conducting the review:

- 1) **Operations:** How has AEMIS been implemented and is it operating efficiently?
- 2) **Technical requirements:** Does AEMIS have high quality regulatory controls?
- 3) **Market access:** Do exported meat and meat products fulfil the requirements of importing countries and is AEMIS responsive to market opportunities and risks?
- 4) **Finance:** Is the system cost-effective and have expected savings from AEMIS been realised?
- 5) **Service delivery:** Does AEMIS meet the expectations of government and industry?

Findings of the review

AEMIS has been fit-for-purpose in fulfilling its most important objective – providing assurance to trading partners in order to maintain and promote market access. There have been no whole-of-market closures since 2011 and a small number of point-of-entry rejections of export consignments, for varying reasons ranging from labelling to in-transit refrigeration issues. AAOs have delivered equivalent food safety and hygiene outcomes in post-mortem inspections. Concurrently, new Free Trade Agreements (FTAs) and technical market access protocols have been signed, including with several of Australia’s top 10 markets for meat exports, including, Japan, Korea, China, Indonesia and Malaysia. However, industry and government do not have an agreed shared strategy or workplan sufficient to address priority market access issues.

The objective of AEMIS to “better align regulatory and commercial resources and systems in delivering export certification services” has only been partially met. In response to industry requests, it has been a policy position of the Australian Government to continue to offer meat inspection (known as the traditional model), even though only the United States (US) requires a minimum of one government inspector assessing every carcass on each slaughter chain. As a result, only half of red meat establishments (accounting for about half of processing throughput) are using AAOs, while the rest continues to use the traditional government inspection model. The reasons are varied and include minimal cost differences with AAOs, outsourcing inspection workforce management to government, and agreement from the department to provide additional non-regulatory services. All pork processors have adopted the AAO model as they do not currently export to markets that require government inspection. Likewise, only about 50 per cent of export processors have moved from monthly to six-monthly systems audits, introduced as part of a risk-based approach, citing little overall difference in cost and effort for more frequent assurance from government.

The decisions made by exporter meat processors have been influenced by the deficient price signal⁵ inherent in the department's cost recovery model. As the Auditor General found in 2019⁶, the department has been under-recovering on fees and over-recovering on levies. This has partially shifted inspection costs to the broader industry rather than to the direct user and disincentivised industry to take up the AAO model, which has also affected the viability of third party providers. However, new pricing models proposed for the Cost Recovery Implementation Statement (CRIS) 2019–2022 address this issue. Industry-wide consultations on the CRIS were still underway at the time of submission of this report. However, Palladium expects this to prompt establishments to reconsider the transition to AAOs, with a number advising the review that they had been keeping this option on the table.

Lower than projected uptake of the AAO model has limited cost-effectiveness and the cost savings realised since the introduction of AEMIS, compounded by the inclusion of additional expenses in the cost recovery model. The Auditor General's report also identified a lack of evidence that the department is recovering efficient costs for its activities, a concern industry also voiced. The department has responded by commissioning an independent review of the cost of its export certification activities, which will report in late November 2019 and inform the CRIS 2019-2022.

Despite this, AEMIS has led to increased efficiency and effectiveness, with room for improvement.

- // Inspection functions are considered by government and industry to be more efficient and contributing to improved on-plant operations.
- // Further inspection improvements are being made through risk-informed research and development that will be reflected in forthcoming updates to the Australian Meat Standard (this has been slow due to intellectual property issues) and equivalence requests to markets.
- // Data collection (including on-chain electronic capture) for carcase condemnations and product hygiene indicators has improved, but it is not yet systematic or integrated. Online databases for importing country requirements and export legislation resources have improved information sharing with establishments.
- // Verification processes have been strengthened, although consistency in approach is an issue. Certification has been streamlined, including through remote printing and electronic certificates for relevant importing countries.
- // Reforms underway to streamline and modernise the Export Control legislation seek to enable government and industry to be more responsive to markets and technological advances within a more agile legislative framework.

This is reflective of a genuine commitment from both government and industry to continuous improvement to ensure a positive future for Australia's meat and meat product export sector, evident throughout review consultations and in concurrent reform processes.

⁵ *Deficient price signal*: when the price charged for a good or service does not convey full information through which stakeholders can make accurate comparisons or alternative products or increase and decrease their quantity demanded.

⁶ The Australian National Audit Office, Auditor-General Report No.38 of 2018–19 *Performance Audit Report*

Trends and risks

Growing competition from countries with lower costs and increasingly high-quality product could erode Australia's competitive advantage unless cost efficiencies are realised. This could be achieved through a combination of reduced input and processing costs, improved returns from yield, and price improvements from high-end product differentiation.

Competition and the increasing complexity and unpredictability of market access, particularly non-tariff barriers, will require AEMIS and all stakeholders responsible for its delivery to be agile, coordinated and appropriately resourced to identify opportunities and manage risks, both strategically and operationally. Without an agreed detailed strategy, workplan or process for prioritising market access activities by government and industry, there is a risk that efforts will be splintered and *ad hoc*.

The sustainability of the system is also at risk – the rate of adoption of the AAO model and competition from government for inspectors means the third party provider model has not proven to be as commercially viable as anticipated. The department, third party providers and companies all have difficulties recruiting staff and this, combined with an ageing workforce, is a business-critical risk.

Culture was a recurring theme of the consultations, particularly in relation to the department's regulatory stance and how this is experienced on-plant. From the department's perspective, concerns were raised about industry's blurring of its role as regulator and service provider, compounded by the cost recovery framework and frustrations about performance management. The department's new Regulatory Practice Framework will help clarify its approach to AEMIS, while industry needs to accept that it is paying the costs of regulation, not of services.

At the same time, industry needs to continue to mature its food safety culture – the way in which everyone in an establishment thinks about food safety and acts to produce safe and suitable food. This will support the department's implementation of a risk-based regulatory framework.

SUMMARY OF RECOMMENDATIONS

Palladium used the following criteria to develop recommendations to ensure AEMIS is positioned to be efficient, effective and fit-for-purpose and continues to improve, including that:

- // it is strategic, evidence-based and agile to meet the requirements of importing countries, address market competition and maximise opportunities
- // supports minimal risk-based regulation of an industry that has a strong food safety culture and corrects incidents of non-compliance
- // it is cost-effective, with transparency in pricing that supports international competitiveness
- // it is sustainable, with all stakeholder groups resourced and confident in their roles and collaborating for mutual benefit
- // it is well governed to ensure strategy and implementation are well aligned.

A summary of the recommendations is provided below, with details on implementation considerations outlined in the review report. While the recommendations are listed under each pillar of enquiry, several are interdependent. Recommendations 1, 4, 7 and 10 are the highest priorities. It is acknowledged that some of these recommendations will require changes in government policy, with associated processes, and/or market access agreement from trading partners.

Operations recommendations

1. That the department only deliver inspection services required to fulfil its regulatory responsibilities under importing country requirements, except where those FSMA's are not fully utilised and have capacity to provide additional inspection and non-regulatory services under cost-efficiency arrangements or where AAO delivery is not viable for small export processors. All other inspection duties which can be undertaken by a company or third party AAO should be transitioned.
2. That the department and industry develop a workforce strategy to support continuity of supply of inspectors and veterinarians, and that the department leverages the broader recruitment options under the Meat Inspectors Enterprise Agreement 2019–22.
3. That the department cease monthly audits and conduct six-monthly Export Meat Systems Audit Program (EMSAP) audits of all compliant establishments and annual audits of high-performing establishments. Establishments which are not compliant may be required to undergo more frequent audits as part of corrective actions.

Technical recommendations

4. That industry and government increase collaboration to improve data collection, integration, analysis and communication to monitor trends on audit and inspection outcomes and market access issues, to improve system performance and compliance and support risk-based approaches that reduce regulatory burden. Data captured can also contribute to whole-of-supply chain improvements and transparency, including on- and off-plant process efficiencies, evidence-based market access, and improved livestock production practices and national herd health.
5. That industry and government continue to prioritise research and development into inspection processes which contribute to market access, product integrity, food safety, and animal welfare outcomes, with consideration given to new technologies and automation.
6. That the department engages third party providers in governance mechanisms and provides direct feedback on performance during the Meat Export Verification System (MEVS) weekly meeting between the On-Plant Veterinarian (OPV) and the establishment management.

Market access recommendations

7. That government and industry, through the Export Meat Industry Advisory Committee (EMIAC), develop rolling annual workplans which define shared priorities for market maintenance and expansion. These annual workplans should be used to inform market access resourcing requirements, particularly for technical negotiations by government.
8. That the department and industry collaborate to monitor trends in point-of-entry rejections for product from Australian meat and meat product exporters, in support of Recommendation 4.

Finance recommendations

9. That government and industry consider the following recommendations during consultations on the Cost Recovery Implementation Statement: Meat export certification 2019-20 and the independent review of export certification costs:
 - a. That pricing Option 3 of the Cost Recovery Implementation Statement: Meat export certification 2019-20 consultation draft presents the most appropriate model, in which levy prices are rebased and a harmonised fee-for-service structure is in place, with all corporate overhead expenses associated with FSMA and OPVs recovered through fees charged to the user
 - b. That the department undertakes more regular, transparent benchmarking exercises to ensure its charges are recovering the efficient costs of operations.

Service delivery recommendations

10. That the department clearly defines and consistently implements its regulatory culture for AEMIS.
11. That industry encourages and supports export meat establishments to continue to mature their food safety culture.
12. That the department ensures its lines of accountability and performance management are clear to industry to facilitate greater transparency and timely resolution of on-plant issues.

2.0 ABOUT THE AUSTRALIAN EXPORT MEAT INSPECTION SYSTEM (AEMIS)

2.1 Scope and definition of AEMIS

The Australian Export Meat Inspection System (AEMIS) is “an integrated set of controls specified and verified by (the Australian) Government that ensures the safety, suitability and integrity of Australian meat and meat products”⁷. The system aims to provide certainty to international trading partners of the safety and integrity of Australia’s meat and meat products and adhere to underlying hygiene and performance standards which are continuously monitored.

AEMIS includes the models and processes for: registration and approved arrangements for export establishments; ante-mortem and post-mortem inspections; verification of food safety, integrity and compliance with importing country requirements; export certification; and performance-based audits ensuring compliance of establishment operations.

There are two tiers of export registration for meat exporting establishments. Tier 1 accounts for establishments exporting to markets that accept meat products prepared under the Australian Standard for the Hygienic Production and Transportation of Meat and Meat Products for Human Consumption AS 4696 (Australian Meat Standard)⁸, which is overseen by a State or Territory Regulatory Authority; Tier 1 registration is insufficient for access to the European Union (EU), US and Canada, China, Japan and other markets. Tier 2 registration is sought by establishments exporting to markets that require Australian Government oversight, involving the permanent presence of a department-employed On-Plant Veterinarian (OPV) at abattoirs and wild game processing establishments and daily presence of departmental circuit inspectors at independent boning rooms.

It is a requirement, under the Australian Meat Standard, that a qualified meat safety inspector performs post-mortem inspections and makes dispositions on each carcass and its parts. This is either done by AAOs or department officials called Food Safety Meat Assessors (FSMAs). AAOs deliver services historically provided by government-employed inspectors, subject to qualifications and compliance with the same standards, and are employed by meat processors or third party providers. The OPV is responsible for ante-mortem inspection, supervision of post-mortem inspections and verifying meat exporting establishment compliance.

The department certifies that the product is eligible for export and complies with legislative and importing country requirements. Requests for export permits (RFP) are validated by an Authorised Person (for the EU, this must be a departmental officer) and an export permit and health certificate are issued.

Government audit activities of AEMIS processes verify industry compliance with the *Export Control Act 1982* and subordinate orders, including importing country requirements and establishments’ Approved Arrangements. Applications for systems audits are approved by Field Operations Managers (FOMs) and they are conducted by Area Technical Managers (ATMs).

⁷ Department of Agriculture 2017, Australian Export Meat Inspection System Information Package

⁸ Browne G, Australian Standard for Hygienic Production and Transportation of Meat and Meat Products for Human Consumption AS 4696:2007, 2007

2.2 Building on a history of reform

The Australian Government introduced AEMIS in October 2011, as part of the Export Certification Reform Package (ECRP). The system had been developed over several years, in consultation with the Australian meat processing industry, and built on a history of reform that has accelerated in the last two decades.

Table 1 – An Overview of Meat and Meat Processing Standards

| | |
|---|---|
| 1963 Codex Alimentarius | <ul style="list-style-type: none"> / The Codex Alimentarius Commission was established to protect the health of consumers globally and ensure fair practices in international food trade. It covers hygiene, labelling, pesticides, and microbiological risks. / The Codex has significant power in trade disputes, and all World Trade Organisation (WTO) members are encouraged to harmonise their national standards with international standards. |
| 1981 Woodward Royal Commission | <ul style="list-style-type: none"> / Following the response to a 1981 meat scandal, when beef exports to the US contained horse and kangaroo meat, the Australian Government committed that a government inspector would inspect all meat and keep it under security until reaching the US. |
| 1982 Export Control Act | <ul style="list-style-type: none"> / The <i>Export Control Act 1982</i> brought in the Export Meat Orders (EMOs) 1985, which were highly prescriptive. |
| 1988 Australian Codes of Practice | <ul style="list-style-type: none"> / The Australian Code of Practice for Veterinary Public Health was the first effort to achieve national uniformity in the hygienic production and inspection of meat for human consumption. / The scope of the codes was narrowed to only include food safety and not food quality issues. |
| 1995 Review of Codes and development of Standards | <ul style="list-style-type: none"> / A review of the Australian Codes of Practice occurred, shifting more responsibility to industry. / These reforms were in part the result of a food poisoning incident that led to one death and 23 children developing Haemolytic Uraemic Syndrome, caused by <i>E. coli</i> 0111 from contaminated mettwurst. |
| 1995 ARMCANZ | <ul style="list-style-type: none"> / The Agriculture and Resource Management Council of Australia and New Zealand (ARMCANZ) resolved in March 1995 that all Australian meat processing establishments (export and domestic) would have quality systems in place that addressed Hazard Analysis Critical Control Point (HACCP) principles by the end of 1996 and that these would be incorporated into a full quality assurance (QA) system as soon as possible thereafter. |
| 1996 US HACCP Final Rule, and Meat Notice 1996-38 | <ul style="list-style-type: none"> / Implementation of HACCP. Australia had trialled implementation in export establishments in 1995. In 1996, the US implemented the HACCP Final Rule. Australia followed suit by implementing HACCP across all export meat establishments in late 1996. |
| 1996 Export from domestic establishments | <ul style="list-style-type: none"> / In December 1996, the Minister for Agriculture announced that exports from domestic establishments under State/Territory certification would be permitted if accepted by the importing country. |

| | |
|---|---|
| 1998 Meat Notice 1998-22 | <ul style="list-style-type: none"> / Security functions were devolved to industry (noting that the EU had more stringent requirements, and still does, albeit to a lesser degree). |
| 2003 Frawley Review | <ul style="list-style-type: none"> / The Frawley Review focused on Australia's future animal health needs and the availability and capabilities of rural veterinarians, recommending harmonisation of domestic and export standards, consistent with international standards. / National surveillance was enhanced through reporting of emergency and endemic diseases by improving data collection, field activity management, strengthening local surveillance and using skilled para-professionals. |
| 2003 Meat Notice 2003-12 | <ul style="list-style-type: none"> / Tier 1 / Tier 2 system introduced, with Tier 1 establishments supervised by the State/Territory authority with no requirement for OPVs, AAOs or FSMAs. The Tier 1 system replaced the 1996 'export from domestic' system. |
| 2004 Meat Notice 2004-05 | <ul style="list-style-type: none"> / The notice foreshadowed that revisions to the EMOs would incorporate the Australian Meat Standard (AS4696:2002) and that, in line with the Standard, it would be mandatory for meat establishments to have Approved Arrangements in place by 1 July 2004 or soon after. |
| 2005 EC(MMP)O | <ul style="list-style-type: none"> / The EMOs were revised to become the Export Control (Meat and Meat Products) Orders 2005 (EC(MMP)O). These are less prescriptive and allow flexibility, innovation, and alternative methods to achieve the required outcomes, provided they have a scientific basis. / The EC(MMP)O stated that the Australian Meat Standard applies to meat and meat products to which the orders apply. / The revisions introduced HACCP-based Approved Arrangements. |
| 2008 Beale Review | <ul style="list-style-type: none"> / The Beale Review focused on improved regulatory arrangements to strengthen the biosecurity system, and more efficient resource allocation. / It recommended the export inspection and certification functions of the Australian Quarantine Inspection Service (AQIS)⁹ should be transferred to a new National Biosecurity Authority (NBA), with the department responsible for trade facilitation. The NBA was not established. / It also recommended a return to full recovery of export certification costs. |
| 2009 Export certification reform | <ul style="list-style-type: none"> / The Australian Government accepted the Beale Review's recommendation to return to full cost recovery and began a process of export certification reform to identify efficiencies and productivity improvements to offset this. / This review process led to the creation of AEMIS. |

2.3 The original intent and objectives of AEMIS

The 2009 Export Certification Review Package

The ECRP culminated in AEMIS, which was designed to ensure meat export integrity, enable market access, and reduce inspection costs. Following the department's acceptance of the Beale Review's recommendation of returning to full cost recovery, funding was provided for the ECRP, which was to run through to 30 June 2011.

⁹ Services provided by AQIS are now part of the Department of Agriculture. Historical references to AQIS quoted in this report that have ongoing effect should be interpreted as relating to the current department.

Funding of \$26 million was provided for meat inspection reform with the aim of reducing the number of departmental meat inspectors through simplified systems and increased efficiency as part of the transition to AAOs. The original intent and objectives of AEMIS were as follows:

// **Total cost reduction** – to reduce the total costs of certification by introducing company or third-party inspection

// **Cost shift to industry** – to shift a portion of the inspection cost to industry, with the \$35 million intended to be borne by industry to be substantially offset by the ability of inspectors to perform other duties

// **Maintain market access** – to use the least amount of regulation in order to maintain international market access for Australian exporters

// **Fairness** – to ensure no processing facility would be financially worse off than its peers in the move away from a centralised government inspection scheme to a decentralised semi-private scheme.

Six Joint Industry–AQIS Export Ministerial Taskforces were implemented for each of six agricultural export sectors, including meat, to identify potential reforms in their respective sectors. The Taskforces had a focus on:

- // reforming service delivery
- // upgrading IT systems
- // reviewing and modernising export legislation
- // reducing costs to industry and AQIS
- // maintaining or improving market access.

The Meat Taskforce agreed, to achieve increased efficiency, government and industry should enable:

- // more efficient inspection functions and staffing arrangements
- // more efficient verification and certification activities
- // a stable and effective transition period
- // strategies which are accepted by importing countries and an ability to manage issues
- // a review of the cost recovery model
- // enhancement of electronic systems.

“The Australian Government has been working with the sector since December 2009 to slash red tape and reduce the cost of the certification process and help Australian meatworks compete internationally. The changes give businesses greater flexibility in how staff are deployed when not undertaking export inspection work, reward good performance, and focus regulatory resources on risk areas.”

Former Agriculture Minister Joe Ludwig,
quoted in Condon, 2011, ‘Ludwig launches new AQIS deal’, *Beef Central*, 5 September

3.0 PURPOSE OF THIS REVIEW

When AEMIS was introduced in 2011, the department and industry agreed it would undergo regular reviews to ensure it continued to deliver positive outcomes and productivity gains.

In December 2016, after five years of implementation, the Export Meat Industry Advisory Committee (EMIAC) agreed to a proposal from the Australian Meat Industry Council (AMIC) to engage a consultant to undertake an independent review. Palladium was appointed by the Australian Meat Processor Corporation (AMPC) to undertake the review in late 2018.

“Several issues (with the system) remain unfinished, unresolved or undelivered, including some that were not anticipated in the original model.”

Export Meat Industry Advisory Committee, Meeting 74, 14 December 2016, Agenda Item 5

The Terms of Reference for the AEMIS Review of export certification services define two objectives:

- 1) Determine the current effectiveness, efficiency and fitness-for-purpose of AEMIS
- 2) Make recommendations about the future needs to the government and industry around the export inspection and certification system, taking into account:
 - // the outcomes/undertakings of previous reviews and reforms including:
 - // ECRP
 - // market access risk and opportunities
 - // the efficiency and cost-effectiveness of the system
 - // any other issues deemed significant
 - // current reforms underway or being considered, including product hygiene indicators, post-mortem inspection and halal certification
 - // the future needs for/delivery of export certification services, for example with the introduction of new technology.

The Review has been overseen by a joint industry-government Steering Group, including representatives of the Australian Meat Industry Council (AMIC), Australian Pork Limited (APL), processors and the Department of Agriculture. AMPC and Meat and Livestock Australia (MLA) participated as observers. Palladium wishes to thank all members, particularly Chair Noel Kelson and Dr Mary Wu of AMIC, who provided the Secretariat.

4.0 REVIEW METHODOLOGY

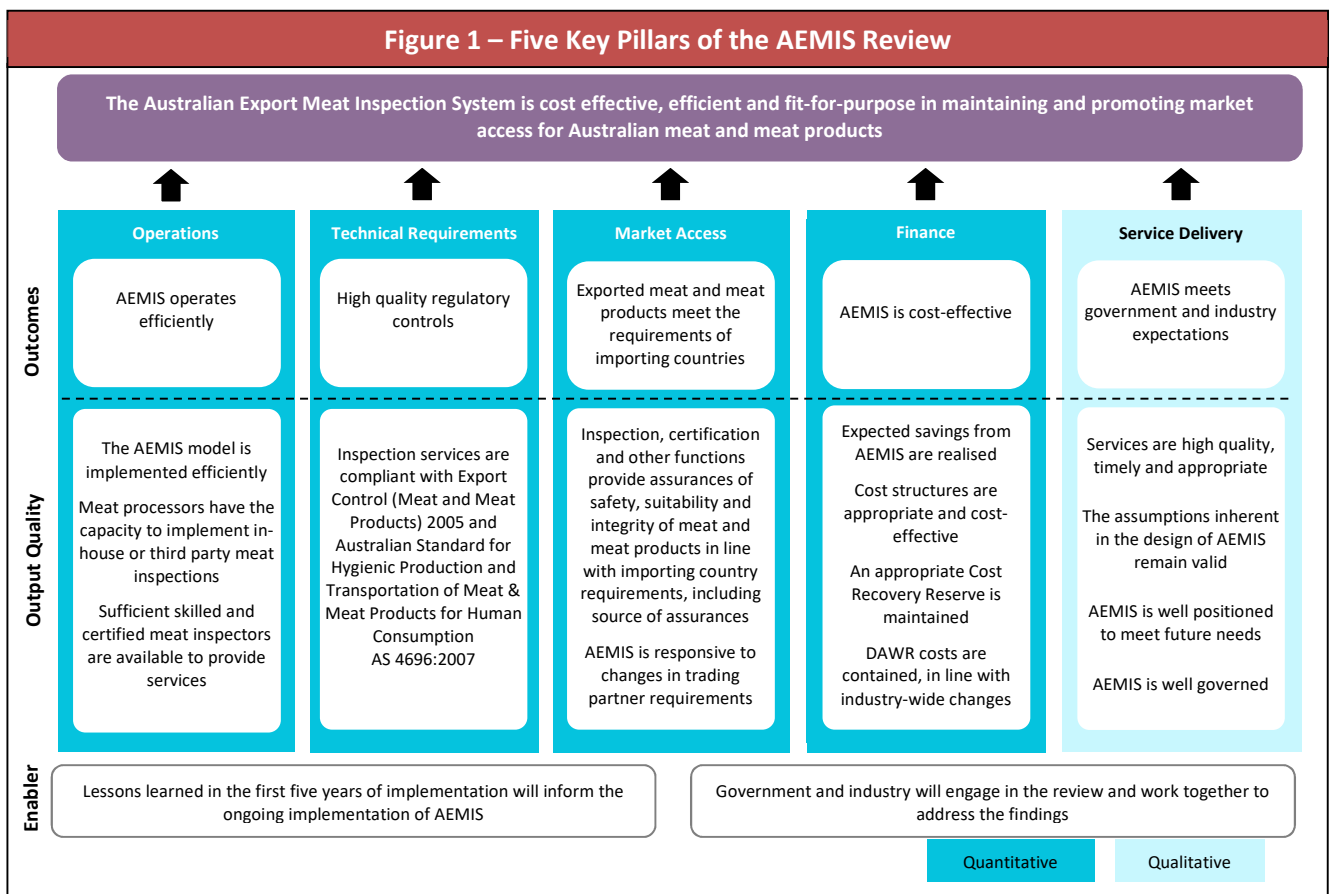
Palladium’s review methodology was based on determining if AEMIS meets the following definitions:

- // **Efficient** – operating effectively in an organised and timely way, with tasks performed by the most appropriate stakeholder
- // **Cost-effective** – the minimum costs necessary to provide the activity for achieving the targeted outcome, with costs borne by the most appropriate stakeholder
- // **Fit-for-purpose** – well equipped or well suited for its designated role or purpose.

This lens was applied to five pillars of AEMIS, asking the following key questions:

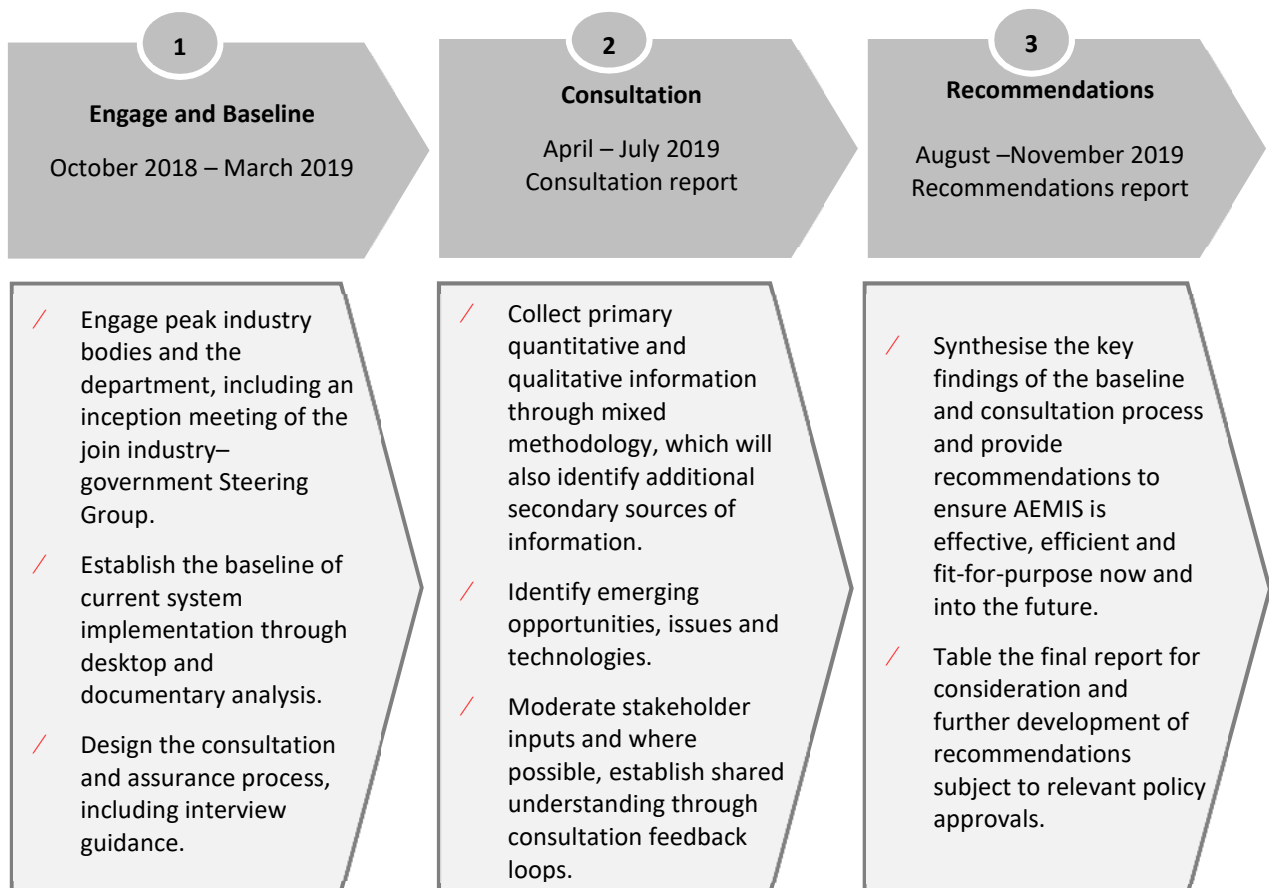
- 1) **Operations:** How has AEMIS been implemented and is it operating efficiently?
- 2) **Technical requirements:** Does AEMIS have high quality regulatory controls?
- 3) **Market access:** Do exported meat and meat products fulfil the requirements of importing countries and is AEMIS responsive to market opportunities and risks?
- 4) **Finance:** Is the system cost-effective, and have the expected savings from AEMIS been realised?
- 5) **Service delivery:** Does AEMIS meet the expectations of government and industry?

Figure 1 shows the key outputs and outcomes of the system if it is determined to be efficient, cost-effective and fit-for-purpose.



The three phases of the review

The review was conducted in three phases, commencing on 15 October 2018 and concluding on 8 November 2019 with the delivery of this Recommendations Report. Palladium thanks all stakeholders who participated in consultations and shared their knowledge, experience and time to contribute to continuous improvement in Australia's meat and meat product export sector. Details of the consultation process are provided in Appendix 1.



Palladium used the following criteria to develop recommendations to ensure AEMIS is positioned to be efficient, effective and fit-for-purpose and continues to improve, including that:

- // it is strategic, evidence-based and agile to meet the requirements of importing countries, address market competition and maximise opportunities
- // supports minimal risk-based regulation of an industry that has a strong food safety culture and corrects incidents of non-compliance
- // it is cost-effective, with transparency in pricing that supports international competitiveness
- // it is sustainable, with all stakeholder groups resourced and confident in their roles and collaborating for mutual benefit
- // it is well governed to ensure strategy and implementation are well aligned.

While the recommendations are listed under each pillar of enquiry, several are interdependent. Issues for consideration in implementation are also provided.

5.0 PROJECT OUTCOMES – OPERATIONS

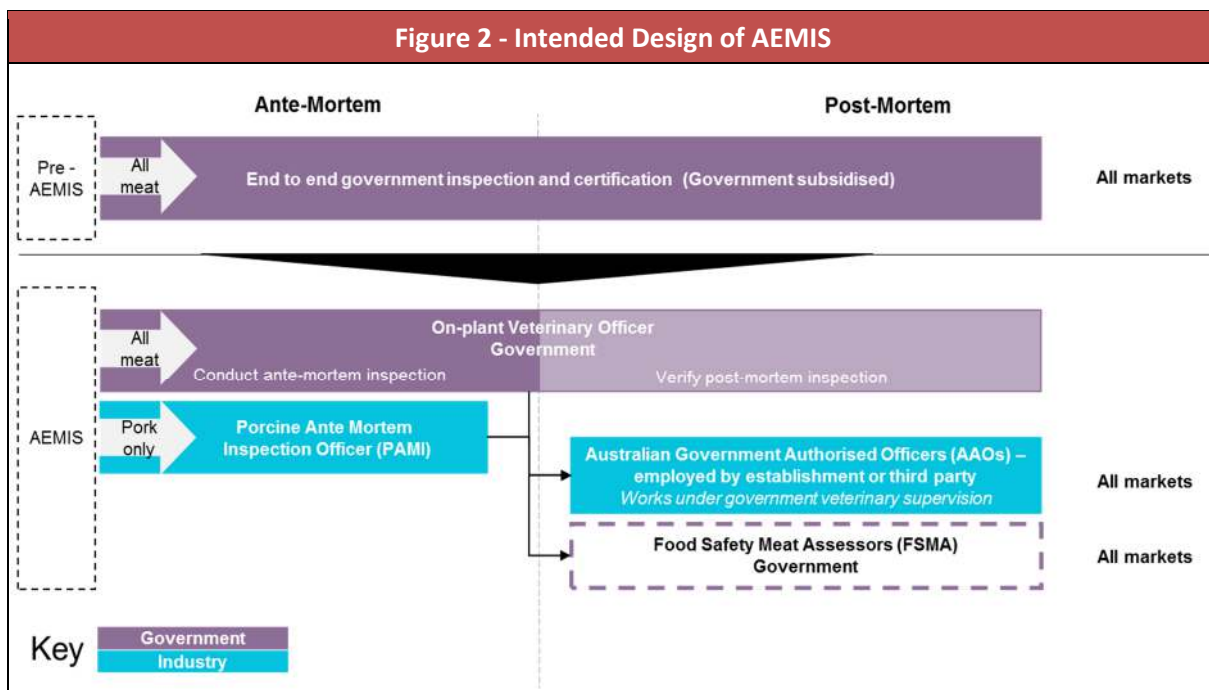
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| <p>Key findings</p> | <ul style="list-style-type: none"> / Approximately half of red meat establishments have implemented the AAO model while the rest have remained with traditional inspection. / Reasons for remaining on traditional inspection are diverse and include minimal cost differences with AAOs, outsourcing workforce management, and negotiation of cost-efficiency arrangements. / Many of these establishments are deliberating moving to AAO inspection, seeking quotes from third party providers and assessing internal costs. / The pork sector has completely adopted the AAO model, as it does not serve the US market which requires government final carcass inspection. / All stakeholders face challenges in recruiting inspectors, with government a beneficiary of inspector movement due to more attractive conditions. / Plants reported a significant audit burden, with regulatory audits from the Australian Government and audits by importing countries and customers. / The department offers some exporters cost-efficiency arrangements to provide additional non-regulatory services. |
| <p>Trends and risks</p> | <ul style="list-style-type: none"> / Approximately 60 per cent of the government inspector workforce is over the age of 55¹⁰, representing a significant business continuity risk. / The third party provider model is constrained; current trends would see a growing chance that providers may exit the market. |
| <p>Recommendations</p> | <ol style="list-style-type: none"> 1. That the department only deliver inspection services required to fulfil its regulatory responsibilities under importing country requirements, except where those FSMA's are not fully utilised and have capacity to provide additional inspection and non-regulatory services under cost-efficiency arrangements or where AAO delivery is not viable for small export processors. All other inspection duties which can be undertaken by a company or third party AAO should be transitioned. 2. That the department and industry develop a workforce strategy to support continuity of supply of inspectors and veterinarians, and that the department leverages the broader recruitment options under the Meat Inspectors Enterprise Agreement 2019–22. 3. That the department cease monthly audits and conduct six-monthly Export Meat Systems Audit Program audits of all compliant establishments and annual audits of high-performing establishments. Establishments which are not compliant may be required to undergo more frequent audits as part of corrective actions. |

¹⁰ Department of Agriculture and Water Resources, Veterinary and Export Meat Services Branch Dashboard Report: EMIAC February 2019, p1

5.1 Design

Historically, government staff conducted all inspection and verification roles within the export regulatory system. AEMIS introduced AAOs, who are employed directly by the establishment or under an approved third party arrangement. AAOs are qualified and authorised to conduct inspection tasks and are legally bound to report to the department through a Deed of Obligation.

This change was the most significant of the reforms under AEMIS and intended to shift a portion of the total inspection cost to industry, offset by providing processors with greater flexibility and the ability of inspectors to perform additional duties when not undertaking export inspection work. AAOs nonetheless retain their independence, as prescribed in a non-interference clause in the export establishment's Authorised Arrangements. Figure 2 is a representation of the intended inspection models, where both FSMAs and AAOs could perform inspection duties for all export markets.



Export establishment models of operation

As a result of a National Competition Policy Review, in 2003 the Australian Government introduced two tiers of registration for export, in recognition that some markets accept products prepared in accordance with the Australian Standard without imposing additional importing country requirements (Tier 1), while others have additional requirements (Tier 2). The throughput split between Tier 1 and Tier 2 establishments is approximately 5–10 per cent to Tier 1, and 90–95 per cent to Tier 2. Establishments cannot be listed simultaneously as both Tier 1 and Tier 2.

Tier 1 Registration

Under the Tier 1 arrangement, State Government Regulatory Authorities (SRA) provide regulatory oversight, including audit systems and ongoing compliance. However, the department remains responsible for verification audits of the SRA, as well as the initial registration. The department is responsible for:

- // verifying that the State regulator has adequate systems in place
- // initially, verifying that the establishment is compliant with relevant Australian Standards and its Approved Arrangement
- // registering the establishment for export.

Tier 1 operations are registered under the *Export Control Act 1982* and operate under an Approved Arrangement of the *Export Control (Meat and Meat Products Orders) 2005*, or the *Export Control (Wild Game Meat and Wild Game Meat Products) Orders 2010*. They can only export to specified countries¹¹.

Tier 2 Registration

Tier 2 arrangements are designed for markets which require the Australian Government to conduct export registration and processor oversight. In addition to the Australian Meat Standard, the establishment must meet the requirements of the *Export Control Act* and additional requirements of the importing country. In terms of inspection and certification requirements, this arrangement requires carcass by carcass inspection from:

- // company or third party meat inspectors – AAOs; and/or
- // meat safety assessors employed by the Australian Government – FSMAs; and
- // the full-time presence of a government OPV to conduct or supervise ante-mortem and post-mortem inspection and to conduct verification.

5.2 Implementation

Model revisions following EU and US decisions

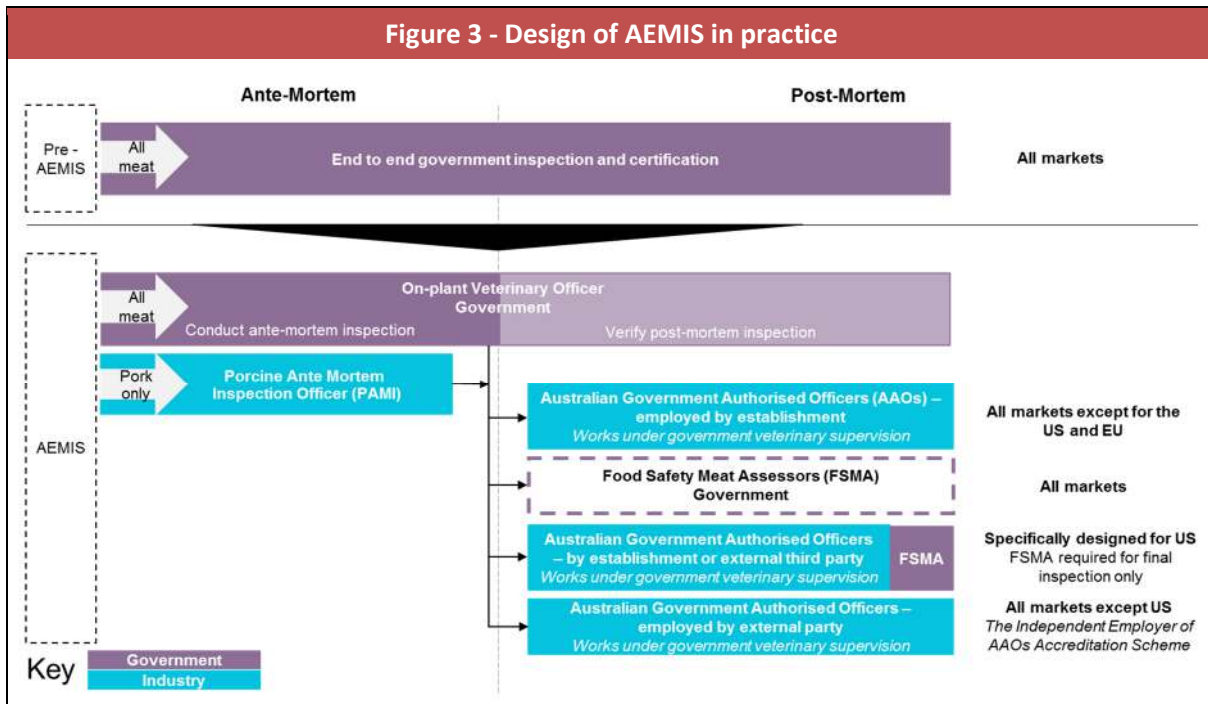
When AEMIS came into implementation in October 2011, the department reported there had been “no concerns regarding the reforms raised by importing countries”¹². However, the simplicity of the system and its widespread uptake was significantly affected when the EU ruled in a 2012 audit (delivered in 2013) that the original AEMIS model for establishment-hired inspectors “did not contribute to the effective management of the potential for a conflict of interest”¹³. The US also reaffirmed its requirement for FSMAs to provide final verification.

As a result, the inspection model was expanded, as shown in Figure 3. Independent third party providers of AAOs were introduced to satisfy EU requirements in place of company AAOs, with the US requiring carcass-by-carcass inspection by a FSMA on chains staffed by AAOs.

¹¹ Department of Agriculture and Water Resources, Export Registered Australian Standard Meat Establishments (Tier 1), July 2017

¹² Department of Agriculture, Fisheries and Forestry, Export Certification Reform Package Meat – Final Report, June 2011, p8

¹³ Health and Consumers Directorate-General – Directorate F – Food and Veterinary Office, European Commission, Final Report of an Audit carried out in Australia from 12 to 24 October 2012, p7



Implementation of inspection models is diverse, allowing individual exporters to meet the needs of their markets and their business, but this has affected the system’s sustainability

Eight years after its introduction, adoption of the AAO model by processors is fairly evenly split with those who have maintained (or reverted to) a traditional model. As reported by the department to the EMIAC Finance and Staffing Subcommittee, as at February 2019, of 73 operational slaughter establishments, 35 (48%) were on traditional or mixed models, 30 (41%) were on AAO models including 5 (7%) with an FSMA on carcass post-mortem inspection point, 7 (10%) were on pork AEMIS, and one cannery required 1 FSMA to meet a US requirement for official presence during production (1%)¹⁴.

Of those processors on traditional or mixed models, a number have been offered cost-efficiency arrangements by government for its FSMAs to provide minor additional non-regulatory services. While the department advised that these arrangements are offered to all users of traditional inspection, one plant advised that it had not been able to establish such an agreement.

Apart from importing country requirements which was cited as the main decision factor, the reasons processors have chosen inspection models are as varied as the number of plants. Decisions were informed (in no particular order) by: perceptions of market acceptance of AAOs when AEMIS was introduced, plant design, throughput, chain speed, cultural alignment, minimal cost differences between AAOs and FSMAs, flexibility of service provision including cost efficiency arrangements with government, outsourcing workforce management, and improved retention of wholesome yield around condemned carcass parts and offal. The pork sector has been more homogenous in its migration to the pork AEMIS model without exception, as the export markets it serves do not require FSMAs or AAOs to be provided by a third party.

While this demonstrates that AEMIS has been successful in meeting the market access and operational needs of exporters, it has had implications for the efficiency and cost-effectiveness of the system.

¹⁴ Department of Agriculture and Water Resources, Veterinary and Export Meat Services Branch Dashboard Report: EMIAC February 2019, p1

The department has stated that it is up to individual processors which model they choose, and that its role is to deliver on the traditional model and regulate others in line with the government's policy commitment to AEMIS. However, the provision of cost-efficiency arrangements and cross-subsidisation of the inspection models (see Section 9: Finance for a detailed analysis) has led to the situation in which the workforce management aspects of AEMIS cannot be considered fit-for-purpose, cost effective nor efficient.

Cost-efficiency arrangements provide benefits to the processor and reduce incentives to adopt non-government inspection. This combination of cost-efficiency arrangements and the cross-subsidisation of inspection models has contributed to a lower than expected uptake of company inspection. This lower than expected adoption level, and uncertainty over future adoption, has a variety of implications for the sector:

- // a hesitance by the department to intensify recruitment efforts and plan for workforce succession
- // a limited ability for the third party industry to benefit from economies of scale and create a competitive market for inspection services
- // an increase in total industry inspection costs.

Lower than expected uptake of streamlined EMSAP audits, despite industry guidance on design

Another significant change under AEMIS has been the introduction of the Export Meat Systems Audit Program (EMSAP), which enables export registered red meat slaughtering establishments and independent boning rooms that meet compliance standards to move from monthly audits by the OPV and ATM to six monthly systems audits by an audit team of two ATMs. The systems audits are more comprehensive and risk-based and determine if systems documented under the Approved Arrangements are effectively implemented to comply with legislative and importing country requirements.

Despite EMSAP being designed with extensive industry consultation, the department reports only about 50 per cent of industry has adopted the streamlined audit system. Feedback on the system was mixed. Some welcomed six-monthly audits as providing them with greater autonomy and responsibility for pro-actively managing their own assurance systems, and that this was appropriate in a risk-based approach.

However, direct and anecdotal views of those who have remained on monthly audits is that they have done so because the EMSAP audits do not provide cost-savings and are as time consuming, taking up to three days for slaughter establishments, and they prefer higher frequency audits to provide more regular quality management assurance. With consideration of the definition of efficiency, the review considers that this means that tasks are not being performed by the most appropriate stakeholder.

All industry stakeholders agreed that there is a need for EMSAP audits to be more efficient, calling on government to reduce the number of days and staff effort involved to achieve the same outcomes, resulting in reduced charges to users. About a quarter of participants recommended a move to revert to audits every second month, while others suggested a move to annual audits for high performers.

Workforce planning for government inspectors and vets is challenging and affects services

An efficient system relies on skilled inspectors who can meet both the predictable and ad hoc demands of industry, ensuring business continuity in a time-critical sector. Both government and industry noted the challenges of recruiting and retaining a stable pipeline of inspection staff, affected largely by skills

shortages, an ageing workforce, the remoteness of processing plants and the working environment. Likewise, the department has challenges recruiting veterinarians to OPV roles¹⁵.

Government inspectors

The primary challenge for the government has been planning its workforce needs in the face of a higher than expected proportion of the sector which has chosen to stay with the traditional model, and ongoing uncertainty over whether exporters will move to the AAO model.

The ECRP included funding of \$26 million to transition the workforce to company-based inspection when AEMIS was introduced¹⁶. In preparation, the department began a progressive process of redundancies and redeployment of inspectors based on 89 plants requiring on average one OPV, as well as one FSMA for each chain, with backup.

By the time the EU and US decisions on the inspection model were confirmed, the meat inspector workforce had already reduced. However, with some companies reversing or delaying their transition or diversifying their approach, the department had to re-engage staff. As at 31 January 2019, it had a total cohort of 234, made up of 141 ongoing FSMAs (also known as permanent), 10 non-ongoing specified term FSMAs and 83 non-ongoing casuals, of which between 40 to 75 FTEs were used each month in the preceding year¹⁷.

The department's options have been further constrained by enterprise agreements covering 2011–2018 which required recruitment of inspectors with Certificate IV qualifications. Only when these options had been fully exhausted could inspectors with Certificate III be hired, for qualification within 12 months. In May 2019, the Fair Work Commission approved the Department of Agriculture and Water Resources Meat Inspection Enterprise Agreement 2019–22¹⁸ which allows the department greater flexibility in its recruitment approaches.

Employees can now be engaged with less than a Certificate III in Meat Processing, on condition of completion of the Meat Inspector training program, including attaining a Certificate IV in Meat Processing (Meat Safety) within 12 months of commencement. To support this, a meat inspector training salary and classification broadband has been introduced in the agreement. The department advised it will develop a workforce plan for inspectors, and undertake rolling recruitment, including targeting local recruitment in regional areas and a younger cohort, to progressively replace the ageing workforce as it leaves through natural attrition. However, the department has indicated that while it can recruit at levels less than a Certificate IV, no training allocation has been included in the 2018–19 or forward budget cycles. The department also stated that hiring candidates with a Certificate IV remains more economical than providing training.

Government veterinarians

The department is also experiencing difficulties in recruiting veterinarians as OPVs. As at January 2019, there were 85 ongoing OPVs, 1 non-ongoing specified term OPV, and 43 non-ongoing casuals, of which between 15 and 35 FTEs were used each month for the preceding year¹⁹.

¹⁵ The review requested historical staffing data over the life of AEMIS from the department to analyse workforce trends; however, at the time of this report the requested information had not been provided, so analysis is limited.

¹⁶ Department of Agriculture, Fisheries and Forestry, Export Certification Reform Package Meat – Final Report, June 2011, p2

¹⁷ Department of Agriculture and Water Resources, Veterinary and Export Meat Services Branch Dashboard Report: EMIAC February 2019, p1

¹⁸ Department of Agriculture and Water Resources, Meat Inspection Enterprise Agreement 2019–2022

¹⁹ Department of Agriculture and Water Resources, Veterinary and Export Meat Services Branch Dashboard Report: EMIAC February 2019, p1

In addition, concerns were raised about the perceived low number of ATMs (12) and FOMs (3) nationally. The workforce profile was based on modelling of industry-wide uptake of six-monthly audits and has not been revisited since AEMIS was introduced.

Implications for government service delivery

These workforce challenges underpinned consistently strong industry criticism of the department about the inconsistency of OPVs and FSMA's on plants. While some companies have experienced significant stability (for example, one company had the same OPV for 22 years), others have seen significant turnover, with one plant reporting four OPVs in a year. Plants had concerns about incoming staff awareness of Approved Arrangements and, when staff move between species, their familiarity with species-specific diseases and processes. Industry also criticised the department for inefficient travel arrangements, describing staff being flown across the country to meet short-term needs rather than using staff closer to the location, adding to the costs of regulation.

The department acknowledges that supply is a challenge. To minimise the impact, it seeks to align staff experience with plant needs, offers planned overtime at reduced cost in its agreements with plants, has quarterly meetings with plants to forecast demand, and reports to EMIAC to support industry-wide discussion of trends. The department recommends that processors regularly review their anticipated demand but reports that updates to agreements are not done as often as it would expect, resulting in more unplanned overtime.

In addition, it seeks to be responsive to crises such as floods and fires. Industry acknowledged some of this effort, but nonetheless roundly criticised the department for its requirement to give four weeks' notice of changes.

"We have to give DAWR a month's notice for them to get inspectors in to manage any changes in the chain, which is difficult to manage in a commercial sense."

Industry consultee

Third party providers face competition from government, company AAOs provide stable workforce

Third party providers experience challenges in recruiting skilled staff, which means they have to invest in up-front training and/or attract skilled and semi-skilled staff from overseas. Up-front costs can include paying a salary for three to six months and training expenses, before a return can be earned from service provision. While total costs vary, training estimates range up to \$30,000 per person.

Recruitment challenges are compounded by a high annual turnover, averaging approximately a quarter of their staff, who move into departmental or company roles or leave the industry. Many recent recruits of government inspectors (8 out of 12 in the round completed in June 2019) have been hired from third party providers and companies. They are attracted by higher salaries, improved allowances and conditions, and the opportunities of working for a national employer.

Third party providers say they cannot compete with the government on a level-playing field, as they benchmark their staff conditions against other roles in the meat processing sector, which do not have the conditions that the government offers. Industry widely criticised the department for "poaching", arguing that they train the workforce at significant expense, while the department reaps the benefits without conducting any training itself. The department acknowledges the issue but contends it is a free labour market and it is required, as a public service agency, to go to market for recruitment. Either way, this is affecting the sustainability of third party providers.

Company AAOs appeared to be the most stable inspector workforce, generally recruited from within the plant (with strict independence requirements in their new roles) and committed to the local community. Nonetheless, plants in areas with low unemployment continue to have challenges, with one plant experiencing between 24 and 86 per cent annual turnover since AEMIS was introduced.

Both industry and government stated that it was critical to recruit staff with the right attitude, including empathy for the animal, dependability, communication skills and vigilance, as well as the skills or ability to acquire the necessary technical qualifications and an understanding of the meat processing sector. Companies and third party providers also pointed to the opportunity to see AAOs as part of a career path – from the slaughter floor to a potential role in quality assurance or management. The demographic of AAOs is younger than government inspectors (generally mid-30s to mid-40s) and in some instances, significantly more gender balanced. Likewise, the age and gender balance of OPVs is improving.

“Company inspectors are generally quite young and willing to learn, and generally the ones coming from overseas are confident and capable.”

Industry consultee

AEMIS options are broadly effective, but stakeholders propose simplification

Industry and government generally consider AEMIS to be a success, particularly with regard to maintenance of market access. However, both government and industry feel there is room for further improvement (sometimes significant) and that some objectives, particularly relating to cost savings, have not been achieved. Several propositions were put forward by stakeholders primarily from industry for an alternative, simpler design and implementation of AEMIS. These were not systematically tested by the review, but these views were often contradicted by others:

- // government delivery restricted to provision of OPVs, along with FSMAs only to meet US requirements, with all other inspection services provided by AAOs
- // reversion to full government service delivery
- // outsourcing of government inspection to third party providers²⁰
- // advocacy to the US to remove the requirement for carcass-by-carcass inspection by FSMAs (however, many felt this is very unlikely to be successful).

5.3 Trends

Adoption of inspection models has not yet stabilised

Plants that have adopted an AAO model indicated a strong commitment to remain with that model and a resistance to return to the traditional model. Further, many plants using a traditional model said they continue to monitor third party provision and, now that it is a proven model, would consider changing when providers are able to deliver a sufficient cost advantage and operational efficiency to justify the cost of migration.

²⁰ In 2015, the department ran a tender to outsource inspection to complement its core service provision; however, third-party providers were more expensive than the department and could not guarantee servicing remote locations. There is a view that this could be revisited, in part because the third-party model has matured and increased in efficiency.

Palladium expects that new cost structures proposed under the *Cost Recovery Implementation Statement: Meat Export Certification 2019-20*²¹ will prompt establishments to reconsider the transition to AAOs (see Section 9: Finance for further details). This would have ramifications for inspector resourcing, as government scales down and AAO providers scale up.

US FSMA verification requirement likely to stay, despite introduction of third party providers in US swine processing

During consultations, some in industry expressed the desire to lobby the US Administration to remove the FSMA verification requirement. This review does not support such a project on the basis of a low likelihood of success and thus a poor return on project investment. In September 2019, the US Department of Agriculture (USDA) announced the modernisation of swine slaughter inspection following a 20-year pilot program called the HACCP-based Inspection Model Project (HIMP), designed to give pork processors more flexibility and control over their operations²². However, as mandated by US Congress, 100 per cent carcase-by-carcase inspection by federal officers will still be required. It is therefore considered unlikely that Australian exporters will be able to successfully lobby to remove this requirement, when US domestic processors could not.

Audits by customers and accreditation agencies are growing, alongside the regulatory requirements of AEMIS and importing countries

Processor and non-processor exporters are required to undergo increasingly extensive auditing, from the department, accreditation agencies, customers and importing countries. Establishments would like consideration to be given to reducing the level of duplication through development of a more unified system or mutual recognition processes – both of processes reviewing the same or similar outcomes and of third party auditors who are suitably qualified. However, government advised it was not aware of market acceptance of mutual recognition beyond government-to-government arrangements, and that key markets would be unlikely to agree to this. Conversely, it may be possible for accreditation agencies and customers to recognise elements of government audits, although this would require negotiation.

Export legislation modernisation will introduce efficiencies for AAOs

The *Draft Export Control Bills Package 2019*²³ includes amendments to arrangements of non-government authorised officers to improve transparency and provide additional assurance to trading partners. Amendments also include a streamlined registration and approval process for AAOs, including a single character test and clearer provisions for third party authorised officers, with the aim of getting them on plants faster. The burdensome approval process was cited during consultations and this represents a positive step toward improved efficiency and cost-effectiveness of the system.

²¹ Department of Agriculture, 2019, *Cost Recovery Implementation Statement: Meat Export Certification 2019-20*, Commonwealth of Australia, Canberra

²² U.S. Department of Agriculture, *USDA Modernizes Swine Slaughter Inspection for the First Time in Over 50 Years*, USDA, 2019 <https://www.usda.gov/media/press-releases/2019/09/17/usda-modernizes-swine-slaughter-inspection-first-time-over-50-years>

²³ Department of Agriculture, *Outline for Improving Australia's Export Legislation: Exposure Draft Export Control Bill 2019*, September 2019

5.4 Risks

Government workforce is nearing retirement age, presenting a potential risk to business continuity

The most significant operational risk to AEMIS is its human resources. Approximately 60 per cent of the government inspector workforce is over the age of 55, as is the veterinarian workforce²⁴. This represents a significant risk to the industry due to the average worker being close to retirement. The department advised that due to the uncertainty regarding future industry adoption of non-government inspection, along with seasonal forecasts that processing volumes may decrease, hiring new inspectors is not an appropriate strategy and could result in a large and redundant government workforce. As a result, workforce continuity plans have been limited.

The inspection risk would be mitigated if establishments transitioned to the AAO model, with a younger, more gender diverse workforce. Another possible scenario is that the department could undertake a large recruitment drive over a short time to replace retiring staff; however, this would put a strain on industry resources and on-plant operations. It would be likely to impact disproportionately on third party providers (see Section 9: Finance) and processors in regions with workforce recruitment challenges.

5.5 Recommendations

Recommendation 1

That the department only deliver inspection services required to fulfil its regulatory responsibilities under importing country requirements, except where those FSMAs are not fully utilised and have capacity to provide additional inspection and non-regulatory services under cost-efficiency arrangements or where AAO delivery is not viable for small export processors. All other inspection duties which can be undertaken by company or third party AAOs should be transitioned.

This review recommends that inspections conducted by the department should be focused on fulfilling its regulatory responsibilities under importing country requirements. Only in instances where the duties of FSMAs required to deliver those services do not constitute 1FTE should they be able to conduct other inspection tasks and provide ancillary non-regulatory services, in order to optimise efficiency. A list of ancillary services should be prescribed and available to all eligible export processors to ensure transparency.

In addition, small export establishments – those that require only one or two FTE inspectors and particularly those that export to markets requiring FSMAs – may find company and third party AAOs a more expensive inspection model given the requirement to have on-plant backup.

This impact would be even more significant under the proposed pricing models in the Cost Recovery Implementation Statement 2019-20, which almost doubles the fees for an FSMA (see Section 9: Finance for more detail). These processors who are unable to source commercially viable alternative arrangements should be exempt from this recommendation, subject to a business case to the department.

²⁴ Department of Agriculture and Water Resources, Veterinary and Export Meat Services Branch Dashboard Report: EMIAC February 2019, p1

This would revive the original intent of utilising non-government inspection as much as possible and reduce the current distortions in the system. Through expanded AAO inspection, it is expected that the industry, particularly third party providers, can work toward achieving economies of scale and reduce average inspection costs, and thus total cost to industry of inspection, in line with original forecasts. As originally designed and affirmed during consultations with industry, AAOs also provide processors with greater workforce flexibility – an important factor in industry production efficiency.

Implementation considerations

This recommendation, if accepted, will require a change of government policy and preparation of a Regulatory Impact Statement (RIS), including industry, union and inspection staff engagement.

Workforce adjustment and associated budget would need to be planned to manage the concurrent scaling down of the government inspector workforce as the private sector scales up. Compared to the similar transition during the original AEMIS implementation which had \$26 million²⁵ funding including for redundancies, today's inspector workforce is smaller and comprises a significant portion of casual workers. Based on current importing country requirements, it is estimated 106 FTE FSMAs would be required, which is a reduction of approximately 34 ongoing staff²⁶. Of the current 100 non-ongoing staff currently, some may still be required for backfilling for workforce absences including leave, training and continuity planning.

While the workforce's mature age profile would ultimately assist in natural attrition, it could be assumed that redundancies, if offered, would be attractive to this cohort. Workforce transition strategies will need to minimise both cost and disruption to the industry.

Advice from third party providers is that they would be able to recruit new staff and train them if required and could do so between six to twelve months.

While this recommendation would result in a decrease in government fees paid by users of direct services, it will be critical for industry to understand what the implications of such a change would be for levies.

Recommendation 2

That the department and industry develop a workforce strategy to support continuity of supply of inspectors and veterinarians, and that the department leverages the broader recruitment options under the Meat Inspectors Enterprise Agreement 2019–22.

A whole-of-sector strategy is required to mitigate the risk to business continuity of the impending retirement of a large proportion of inspection and veterinary staff in government, and to contribute to the sustainability of the AAO model. The approach to this recommendation will vary subject to whether Recommendation 1 is pursued, or if the majority of industry adopts the AAO model.

If Recommendation 1 is not implemented, the strategy will need to focus on diversification, particularly of age and including gender, in the workforce. If it is implemented, or if establishments transition to the AAO model, the focus will be on managing the scale-down of government inspectors and scale-up of AAO staff, as noted above, complemented by ongoing diversification in the government workforce.

²⁵ Department of Agriculture, Fisheries and Forestry, Export Certification Reform Package Meat – Final Report, June 2011, p2

²⁶ Consultations with the Department of Agriculture

While some efforts have been underway in recent times, with the support of MINTRAC, to attract younger professionals and women, the need for this is growing as the workforce ages.

For the first time, the new Enterprise Agreement allows the department to recruit inspectors with less than a Certificate III in meat inspection, who would be employed on a training broadband and must attain a Certificate IV in Meat Processing (Meat Safety) within 12 months of commencement. While the review acknowledges the department's obligation to recruit in accordance with Australian Public Service (APS) guidelines, particularly merit-based selection, in the most efficient and low-cost way, it is recommended that the department actively pursue a policy of recruiting a portion of their inspector intake on the training broadband, potentially through a trainee program. This would diversify the government inspector workforce, mitigate the workforce issues currently experienced by third party inspection providers, and provide new job opportunities for candidates to be locally employed and remain within their community.

While the veterinarian workforce gender balance is more equal and improving with new hires, the workforce is still of mature age. Veterinarian workforce succession plans should also be intensified to mitigate workforce continuity risk.

Implementation considerations

The department has stated that no budget has been allocated for inspector training, despite this option in the new Enterprise Agreement. Acceptance of this recommendation will necessitate a training budget to incorporate both direct training costs and salary during the training period as inspectors must possess a Certificate III before performing official inspection duties which can be cost-recovered. This training budget would need to be recovered through a further increase in FSMA charges, so will require agreement from industry.

Further, the department noted that, as the components of the Certificate III have recently been updated, the qualification requirements of inspectors should be reviewed. This review supports such analysis. It is noted that any changes to these training requirements would need to be communicated to markets.

Recommendation 3

That the department cease monthly audits and conduct six-monthly Export Meat Systems Audit Program audits of all compliant establishments and annual audits of high-performing establishments. Establishments which are not compliant may be required to undergo more frequent audits as part of corrective actions.

This recommendation seeks to align the EMSAP with original calls from industry for a streamlined audit system. It would also ensure that government delivers only the level of risk-based regulatory services required to fulfil its responsibilities, while industry takes greater responsibility and autonomy for managing their assurance systems in accordance with their Approved Arrangements. Further, the possibility of annual audits should be considered for high performing establishments with a demonstrated reduced risk profile. This would support the progressive maturing of the industry's food safety culture, as described in Section 10: Service Delivery.

This recommendation follows a core principle of this review that voluntary actions by plants should not be cross-subsidised by others in industry through the utilisation of government resources. Where any establishment is seeking more frequent audits as part of their assurance management, this should be done through commercial arrangements with third party audit providers.

Establishments which are non-compliant may be required to undergo more frequent audits, subject to the corrective actions determined appropriate by the department. Improved data capture and analysis, described in Recommendation 4, could assist the department to identify establishments at risk of non-compliance and enable more targeted preventative and remedial oversight.

Implementation considerations

Implementation of this recommendation should include:

- // improving the efficiency of the EMSAP audits, including reducing the amount of time and effort by government and establishment staff to achieve the same outcomes, and lower costs
- // reviewing workforce modelling undertaken prior to the start of EMSAP for ATMs and FOMs required for the audit workload, among other duties
- // consideration of the potential for mutual recognition of third party audits and/or audit providers to reduce duplication and introduce contestability, for importing country agreement as required.

A definition of 'high-performing' export processors will need to be established which encompasses the criteria which need to be met prior to achieving this status. It is suggested that this definition be based on an acceptable level of reduced risk relative to broader industry. Likewise, further consideration needs to be given to 'non-performing' processors and the appropriate level of audit assurance required.

6.0 PROJECT OUTCOMES – TECHNICAL REQUIREMENTS

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|--------------------------------|---|
| <p>Key findings</p> | <ul style="list-style-type: none"> / AEMIS has been found through the department’s regulatory responsibilities and in audits by key trading partners to meet the technical requirements of importing countries. / AAOs have delivered equivalent food safety and hygiene outcomes in post-mortem inspections as FSMAs. / There has been insufficient engagement between government and third party providers on verification reporting and no involvement of third party providers in government-industry governance bodies such as EMIAC. / Significant effort is underway to modernise and streamline inspection and verification approaches to meet food safety, integrity and importing country requirements, as well as commercial outcomes, based on science, risk assessment and stakeholder engagement. / Data is not systematically captured, integrated and analysed across the system, and feedback to livestock producers is not consistent. |
| <p>Trends and risks</p> | <ul style="list-style-type: none"> / Increasing consumer expectations of animal welfare, food safety, quality and traceability may increase technical requirements. / Science-based evidence of the food safety and integrity standards of Australia’s meat exports will remain critical, and provides a comparative advantage in market access, particularly for niche and premium markets. / Emergent animal diseases in destination markets (such as African swine fever) and competitor producers may present opportunities for Australian exports, but also underscores the importance of a continued focus on biosecurity. |
| <p>Recommendations</p> | <ol style="list-style-type: none"> 4. That industry and government increase collaboration to improve data collection, integration, analysis and communication to monitor trends on audit and inspection outcomes and market access issues, to improve system performance and compliance and support risk-based approaches that reduce regulatory burden. Data captured can also contribute to whole-of-supply chain improvements and transparency, including on- and off-plant process efficiencies, evidence-based market access, and improved livestock production practices and national herd health. 5. That industry and government continue to prioritise research and development into inspection processes which contribute to market access, product integrity, food safety, and animal welfare outcomes, with consideration given to new technologies and automation. 6. That the department engages third party providers in governance mechanisms and provides direct feedback on performance during the Meat Export Verification System (MEVS) weekly meeting between the OPV and the establishment management. |

6.1 Design

The technical requirements of AEMIS prescribe the outcomes required of the system and the processes involved in achieving them. Table 2 outlines the key elements of the system.

| Table 2 – Elements of AEMIS | |
|-----------------------------|---|
| Registration | <ul style="list-style-type: none"> ✓ Exporters must be licensed by the department to export, including technical accreditation by AUS-MEAT, plus demonstration of financial standing, competence and integrity. ✓ Licences are issued for 12 months. ✓ Each establishment's Approved Arrangement describes the specific processes and procedures that will enable the establishment to successfully export to specific destination markets. |
| Inspection | <ul style="list-style-type: none"> ✓ Ante-mortem inspection is conducted by an OPV, assisted by FSMAs at larger plants, Porcine Ante-Mortem Inspectors (PAMIs) or AAOs where authorised, within 24 hours before slaughter to ensure that only animals fit for meat and meat products suitable for human consumption are slaughtered. This includes consideration of place of origin and assessment of condition, disease or abnormality. ✓ Post-mortem inspection includes inspection of the carcass, carcass parts for human consumption and other parts that may indicate disease or abnormality. Assessment is by physical observation including incisions, palpations, sight and smell. ✓ The department also manages the Independent Employers of AAOs Accreditation Scheme. AAOs can fulfil all inspection duties, except for the EU (unless they are third party providers) and carcass-by-carcass for the US market. |
| Verification | <ul style="list-style-type: none"> ✓ OPVs verify inspections at Tier 2 plants, with support from FSMAs for the US market, including assessment of the product (carcass and offal) and the processes for inspection, correlation and disposition. ✓ OPVs conduct food safety verification of processor hygiene practices through the Meat Hygiene Assessment (MHA) and MEVS, including their HACCP systems and sanitation practices. Establishments are responsible for recording product hygiene indicators to monitor and assess process control performance, including comparative analysis across comparable establishments. |

| | |
|----------------------|---|
| Certification | <ul style="list-style-type: none"> / The establishment raises a request for export permit (RFP) through EXDOC. / The department confirms the product is eligible for export and complies with legislative and importing country requirements. The RFP is validated by an Authorised Person (for the EU, this must be a departmental officer) and an export permit and health certificate are issued through EXDOC. / Export permits are required by the Australian Border Force prior to export clearance being granted. |
| Audits | <ul style="list-style-type: none"> / Performance-based audits conducted by ATMs verify industry compliance with the <i>Export Control Act 1982</i> and subordinate orders, including importing country requirements and establishments' Approved Arrangements. / Audits are conducted monthly or, under EMSAP, every six months and complement more regular on-site verification of the food safety systems by OPVs. |

The technical requirements for these outcomes are prescribed at three levels:

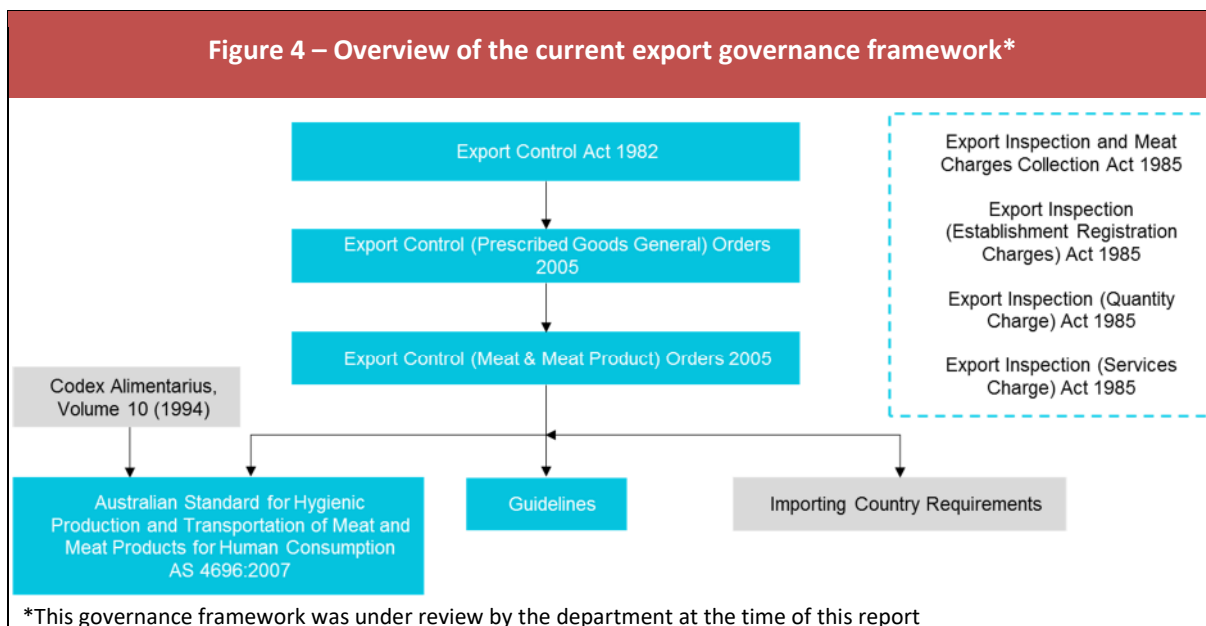
1. The Australian governance framework, including internationally compliant legislation, standards, guidelines and work instructions, particularly the Australian Meat Standard, which is currently being reviewed²⁷ (see Figure 4)
2. Importing country requirements, including variations to Australia's governance framework
3. The application of these within an establishment, as defined in its Approved Arrangement. This includes any approved equivalent procedures or technologies that differ from the Australian Meat Standard or currently accepted and approved science and/or industrial practices within the Australian export meat industry but that comply with export legislation, food safety standards, animal welfare standards and importing country requirements.

The combined objectives of these frameworks are to ensure:

- // meat and meat products comply with food safety standards and are wholesome, or else removed from the food chain and dealt with separately
- // the accurate identification, traceability and recall of meat and meat products
- // any statement made in relation to the condition of meat and meat products or their production is accurate
- // the handling and slaughtering of animals comply with animal welfare standards, as they relate to food safety and public expectations of wholesomeness
- // the requirements of importing countries are met
- // an accurate assessment can be made as to whether these objectives are met.

²⁷ Consultation is underway on the *Draft Export Control Bills Package 2019*.

Figure 4 – Overview of the current export governance framework*



These frameworks had all been in place prior to the introduction of AEMIS. The key changes made as part of the design of AEMIS through the ECRP included:

- // the development of policies and guidance relating to AAOs and Independent AAO Employers, including:
 - // the appointment and use of AAOs to undertake prescribed functions in accordance with the Australian Public Service Code of Conduct, direction of departmental officers and department-issued work instructions for inspection and verification tasks
 - // OPV verification of AAO performance against agreed instructional materials and key performance indicators and results recorded in a national database (with FSMA assistance as needed)
 - // the role of Independent AAO Employers and establishments in ensuring AAOs are able to perform their duties, including training
- // improvements to streamline inspection processes and reallocate responsibilities, and initiation of a process to review the Australian Meat Standard
- // new IT platforms to support the implementation of the technical requirements, increase and monitor performance, and improve data collection and operational efficiencies, including:
 - // the Manual of Importing Country Requirements (MICoR)²⁸: online searchable guide that provided information on importing country requirements electronically for the first time
 - // the Audit Management System (AMS), an interactive web portal which automated manual systems to improve the department’s management, monitoring and reporting on the performance of establishments and AAOs to identify issues, enforce corrective or preventive action to areas of greatest risk or benefit and demonstrate compliance to trading partners

²⁸ Department of Agriculture, MICoR - Manual of Importing Country Requirements, <https://micor.agriculture.gov.au/Pages/default.aspx> , 2019

- // EXDOC, which enabled remote printing of meat export certificates and halal certificates by exporters or agents for the first time, and which is now being upgraded to NEXDOC²⁹.

6.2 Implementation

AEMIS is meeting the required technical standards, with corrective action to address non-compliance

Key considerations for whether the technical requirements are being met efficiently and are fit-for-purpose are listed below.

- // How well are the processes meeting the required standards and how is non-compliance managed and addressed?
- // How timely and efficient are the processes to meet these requirements, and are the right stakeholders involved in the right ways?
- // What processes are undertaken to update technical requirements and how efficient are they? How regularly do they need to be updated?

As the Competent Authority, the department advised the review that AEMIS is ensuring exporters meet the technical requirements of Australia's standards and additional requirements of importing countries through inspection services, verification, certification and establishment audits guided by clear standards and work instructions. This view was widely supported by industry.

Audits of AEMIS published by importing countries, specifically the US and the EU, were also analysed and their assessments have been incorporated throughout this section of the report. These system-wide audits are based on analysis of documents and data relating to AEMIS, and corrective action taken since the previous audit, meetings with the department as Competent Authority, on-site visits to select establishments for verification of system implementation, evaluation and feedback to the department. US audits have focused on plants "whose raw meat products repeatedly failed to meet FSIS (the US Food Safety and Inspection Service) food safety standards during re-inspection at United States' point of entry"³⁰.

The US conducted audits in 2013, 2014, 2016 and 2018. Each time, it found that AEMIS had been implemented "in a manner that is consistent with the design that FSIS determined to be equivalent in 2011"³¹, albeit with recommendations for action particularly relating to food safety and hygiene. The EU conducted audits in 2012, 2014 and 2015 (high quality beef only). As previously noted, the 2012 audit led to the creation of the third party employer AAO model because of concerns over conflict of interest management; however, other technical requirements were met.

The 2014 and 2015 audits found that AEMIS "generally provides satisfactory assurances that the requirements for export to the EU were met"³², with recommendations relating to certification, audits, record management, labelling and livestock identification.

²⁹ Department of Agriculture, Next Export Documentation System (NEXDOC), <http://www.agriculture.gov.au/export/certification/nexdoc>, 2019

³⁰ USDA FSIS, Australia Final Audit 2014, p5

³¹ USDA Food Safety and Inspection Service 2014, Australia - Final Audit Report, p21

³² Food and Veterinary Office – European Commission, 2014, Final Report of an Audit Carried Out In Australia from 18 to 31 July 2014

Departmental responses (published as appendices to the audits) demonstrate responsiveness to requirements for corrective action to those recommendations considered relevant. This included outlining actions such as amendments to standard operating procedures and work instructions, updated training for government officials, targeted support to establishments with violations, and advice to industry more generally. These non-compliance issues and corrective actions are expanded on below.

Ante-mortem inspections are effectively monitoring animal health and welfare, but efficiencies were suggested

Ante-mortem inspections, predominantly undertaken by OPVs, are fulfilling their role in ensuring “only animals fit for slaughter for the purpose of producing meat and meat products for human consumption are slaughtered”³³, while also monitoring animal welfare and conducting surveillance for emergency and exotic animal diseases. However, the requirement for animals to be slaughtered within 24 hours means that the availability of an OPV for ante-mortem inspection is critical. Many establishments argued that the role could be done by trained stockhands or inspectors, at least up to the suspect yard. This is the case in many pork establishments, with the role performed by PAMIs, which those pork processors consider to be a more efficient and cost-effective model. Importing countries which currently require ante-mortem inspection by OPVs would need to approve this change. Health certificates for these and some other countries also declare that the ante-mortem inspection has been conducted by a veterinarian.

Traditional and AAO post-mortem inspection outcomes meet the same standard, but industry called for verification to be consistent

All stakeholders interviewed expressed confidence that AAOs are achieving equivalent outcomes to government inspectors, providing assurance that technical requirements are being met. During the design of AEMIS, the department undertook a study to evaluate the performance of post-mortem inspection by AAOs compared to FSMAs in relation to food safety and hygiene outcomes in sheep and beef slaughter establishments, with consideration of pathology, carcass hygiene and microbiological standards. Any issues detected during the study were rectified according to procedures and work instructions, and corrective or preventive actions by the company were verified as resolved by department staff. The study found “no appreciable difference in the food safety or wholesomeness outcomes as a result of the inspection model (AAOs versus FSMAs)”³⁴.

Before AEMIS, there was no formal, documented procedure for objective measurement of the effectiveness of the post-mortem inspection process, although inspectors were supervised by offline senior staff responsible for ensuring they met required standards.

AEMIS introduced OPV verification of AAOs’ work to monitor their performance and provide assurance to all markets, in response to requirements of the US for equivalence³⁵. OPVs verify AAOs’ work for its compliance with inspection processes and carcass and offal food safety and hygiene, which the department advises demonstrates ongoing achievement of the same standard as FSMAs.

³³ G. Browne, Australian Standard for Hygienic Production and Transportation of Meat and Meat Products for Human Consumption AS 4696:2007, 2007, p23

³⁴ Department of Agriculture, Fisheries and Forestry, 2011, A comparison of the carcass inspection outcomes in Australian beef and sheep slaughter establishments comparing the performance of AAOs with FSMAs, p8

³⁵ U.S. Department of Agriculture, Food Safety and Inspection Service, 1999, Federal Register Notice Vol 64 No 108, Monday June 7, p30299

Third party providers and companies complement verification approaches with their own monitoring, testing and refresher training by leading hands and supervisors.

"I believe AEMIS is a good system. It's robust. (The department is) stringent in their reviews, which gives us confidence in our own processes."

Company AAO plant

"We don't want our competition to fail, because if one fails, we all fail."

Third party provider

During implementation, the department extended verifications to include the work of FSMAs to make the system more robust, even though it is not a requirement of any importing countries. While verification standards are the same for AAOs and FSMAs, the sample sizes are different. For AAOs, 2.5 per cent of kill for the first 2000 is sampled each shift, then 1 per cent of the remainder. Only 1 per cent of FSMAs' work is verified with a minimum of 11 and maximum of 21 per shift³⁶. Sampling of offal inspections is about 5.5 times more for AAOs than FSMAs³⁷.

The department advises the difference is because verification of FSMAs is not required by markets and FSMAs generally have more experience, including that AAOs are only trained on one species. Nonetheless, company and third party providers of AAOs called for verification of FSMAs and AAOs to be consistent.

Third party providers and companies also called on OPVs to have greater consistency in their approach to oversight. One of the most common concerns was that, in an outcomes-focused regulatory framework, OPVs are able to interpret the Australian Meat Standard and departmental work instructions differently while achieving the same outcomes, giving AAOs different advice and in some instances, penalising them. This situation is exacerbated by regular turnover of OPVs at plants. The department said this is not unusual in an outcomes-based approach, but that any concerns should be raised through the Veterinary and Export Meat Group (VEMG), which oversees OPVs.

In addition, there were regular calls for OPVs to be more timely and consistent in reporting on AAO performance to the AAOs' supervisors in third party providers. While issues are required to be reported immediately to the AAO for corrective action and usually raised with leading hands on the slaughter-floor, documented reporting on verification outcomes to supervisors is provided in a weekly verification form, which is provided to the ATM and the department's Food Safety Unit, and reported at weekly meetings with plant management. Generally, third party providers are not involved in these meetings, as they address broader issues than post-mortem inspection. This means that feedback on AAOs is provided through the company. Both third party providers and processors identify this as an issue, given that third party employed AAOs are intended to be independent of the company. They recommend coordinated verification reporting at a plant level.

The review also identified a need for stronger engagement between the department and third party employers of AAOs at a more systemic, strategic level to share intelligence and discuss trends, issues and performance. Based on preliminary feedback from this review, the department established annual governance meetings with third party providers in September 2019.

³⁶ Department of Agriculture and Water Resources, 2017, Work instruction: verifying performance of a non-department authorised officer; Work instruction: verifying performance of food safety meat assessors

³⁷ Comparison of port-mortem verification recording sheet: cattle and buffalo, AAOs and FSMAs

Continuous, evidence-based improvement to post-mortem inspection – but market agreement is required

Changes made to simplify and modernise inspection, verification and certification activities through the ECRP were acknowledged as taking the industry forward, and empowering processors to implement quality management systems for greater control over product safety and suitability. However, stakeholders said there was more to do and they unanimously supported continuous improvement to ensure that the regulatory framework remains relevant and fit-for-purpose. AMPC and Meat and Livestock Australia (MLA) have a joint food safety program, which includes prioritising research and development on inspection-related food safety issues, with consideration of the benefit to trade, biosecurity, production and commercial returns.

A range of reviews and projects are being implemented concurrently with this review, jointly funded and/or implemented by the department and industry. This includes a review of post-mortem inspection practices and associated changes to the Australian Meat Standard, with consultation between the department, industry and State and Territory Governments through the Australian Meat Regulators Group (AMRG). The AEMIS review did not seek to duplicate that effort, however, views raised by stakeholders are reflected.

The review of post-mortem inspection and the Australian Meat Standard is comprised of a portfolio of research projects, building on the update to the Standard in 2007 and further reforms overseen by the ECRP Meat Ministerial Taskforce. It will have a significant impact on AEMIS.

The focus is on modernising practices using the Codex Alimentarius Commission risk assessment guidelines and World Organisation for Animal Health (OIE) guidance, for cost-effective, evidence-based improvement to inspection practices to achieve equivalent or better food safety outcomes, without compromising suitability and animal health and welfare surveillance. It responds to improvements in animal health status and risks arising from meat-borne hazards that are not detected by post-mortem inspection³⁸. Recommendations include reducing inspection interventions, particularly palpation and incision, to limit the risk of spreading potential contamination across the carcass and offal. Analysis has been done on specific diseases and dispositions with consideration for the risk they pose and the returns to industry of changes, including *Cysticercus bovis* in cattle and *Caseous lymphadenitis* (CLA) of sheep and goats.

All stakeholders supported these reforms; however, processors were strong in their message to government that it is critical that any technical changes for exporters are only made with any necessary agreement from importing countries. This message contradicts other calls for government to be assertive and confident in Australia's systems. At the same time, industry was critical of departmental delays in progressing these changes, which the department acknowledged is a consequence of the complex regulatory and legislative framework and associated stakeholder engagement processes.

The researchers, departmental representatives and industry partners told Palladium that a systemic approach is being taken to ensure changes are made in lock-step, including:

- // Agreement between the Commonwealth, States and Territories on changes through the AMRG

³⁸ Meat and Livestock Australia, AMPC, Australian Pork Limited, Department of Agriculture and Water Resources, 2018, Industry investment in the review of post-mortem inspection and disposition judgements and development of condemnation feedback systems – Fact Sheet

- // Updates to the Australian Meat Standard: AMRG Guideline 2019:1 Post-Mortem Meat Inspection was issued in December 2018³⁹ for application in domestic plants only while an update to the Standard is being pursued; however, this has been protracted due to intellectual property issues. Until the Standard is amended, export establishments cannot implement the changes.
- // Development and implementation of a national training plan to ensure veterinarian, inspection and relevant plant staff are informed of the changes, including updates to training modules for Certificates III and IV and work instruction (the department is working with MINTRAC)
- // Advocacy to markets to seek acceptance of equivalence (equivalence submissions are under development and a schedule is being resolved; however, it is noted that it can take several years to negotiate market acceptance).

At the same time, the department engages in global forums, particularly the Codex Alimentarius Commission, the OIE, and the World Trade Organisation (WTO) committees on Technical Barriers to Trade (TBT) and Sanitary and Phytosanitary Standards Measures (SPS) to influence and align with globally agreed practice. For example, the Office of the Chief Veterinary Officer is engaged with the OIE's Observatory project, set up to monitor progress and constraints members face in implementing sanitary standards to ensure they remain relevant and fit-for-purpose and support transparent trade.

Product hygiene review recommendations ready for market consideration

OPVs are also responsible for verifying processor hygiene practices, under the Product Hygiene Indicators Program (PHIP) introduced in 2010, building on the MHA.

From September 2018, all export registered slaughter and boning establishments and departmental personnel have been required to enter monthly Product Hygiene Indicators (PHI) data into the Meat Export Data Collection (MEDC) system. This includes indicators relating to plant, personal and equipment hygiene, microbiological assessment on carcasses and in carton meat, MHA and hygiene of packaged product. While industry acknowledged the importance and value of such data collection, some raised concerns that the system for reporting needs strengthening because it provides comparisons between plants, without assurance of the quality and consistency of the approaches plants take to data collection and reporting.

The department acknowledged that MEDC is a new system and, while the indicators are established, the analytical framework needs to be further developed to allow remote scrutiny of establishments in real time. This would enable the department to track issues and identify when audits are required, positioning it as a risk-based regulator.

This heightened attention to recording and analysing PHI responds in part to concerns raised in audits. Following repeated point-of-entry rejections for zero tolerance contamination on meat products and other food safety issues (approximately 0.01 – 0.04 per cent of total exports to the US over the implementation of AEMIS)⁴⁰, the US reviewed records of non-compliance on plants.

³⁹ NSW Department of Primary Industries, 2018, AMRG Guideline 2019:1 - Post Mortem Meat Inspection

⁴⁰ US Audits, 2013, 2014, 2016, 2018

It observed that zero tolerance non-compliance on-plant and point-of-entry violations are not recorded and/or related as inadequacies in establishments' implementation of their HACCP plan, and could lead the department and establishments to "inaccurately conclude that the HACCP plans are working as intended"⁴¹.

The department advised it would take regulatory actions that range from verification activities to denial of access to the US market when three violations take place in one year. However, it also advised that such non-compliance is not related to the inspection and verification system and that the MHA operates independently and is the responsibility of the establishment⁴². It updated its instructional material and provided additional training for staff.

In addition, AMPC has funded a pilot and analysis of outcomes for proposed revisions to PHIP⁴³, specifically possible alternative monitoring regimes for microbiological and visual testing of carcasses, bulk meat, primals and offals. The project, which concluded in January 2019, included assessment of its effectiveness and the performance, ease of use and understanding for OPVs and quality assurance staff, and the design of a reporting and responding system⁴⁴. The project also provided information for use by the department to prepare equivalence statements.

Proposed legislative changes will streamline processes for updating the exports framework, including reforms to technical requirements

Following a review of agricultural export legislation in 2015, the department is proposing to streamline the legislative framework, consolidating over 20 Acts (including the *Export Control Act 1982* and the *Australian Meat and Livestock Industry Act 1982*) and 40 instruments relating to the export of meat and meat products. The changes will maintain the existing levels of regulatory oversight, while making the legislation easier to understand and comply with, removing duplication and enabling greater flexibility to meet the emergent requirements and opportunities of importing markets.

This will enable the legislative framework to be more responsive to changes in import conditions, technologies, and technical requirements and processes, without disrupting trade. Under the current arrangements, amendments may need to be considered by the Parliament, the Governor General and the Minister to take effect, causing delays of up to years for even minor changes. The new framework enables changes to be effected efficiently through commodity-specific Export Control Rules, which will be made by the Department Secretary, with consideration of the regulatory impact, and subject to Ministerial approval of any policy change and parliamentary oversight.

Public consultations have been underway on the updated *Export Control Bills Package 2019* and submissions closed on 9 October 2019. This will provide the legislative authority for the draft Export Control Rule 2020 – Meat and Meat Products, which is being amended by the department following consultations which closed in January 2019.

⁴¹ USDA Food Safety and Inspection Service, 2014, Australia – Final Audit Report, p8

⁴² For example, Department of Agriculture and Water Resources 27 August 2014, Response to Australia Final Audit, Commonwealth of Australia, Canberra, p8

⁴³ J. Jolley, A. Kiermeier & A. Sumner, 2019, AMPC Project 2018:1070 Process Monitoring for the Australian Meat Industry – A Comparative Industry Trial

⁴⁴ Ibid, p5

Certification processes are increasingly efficient, but integration is required

Australia's electronic certification platform, EXDOC, is considered to be efficient, reducing the time and resources required to finalise this process in readiness for export, and enabling real-time submission of health and export certificates to eligible importing countries. Its successor NEXDOC is being progressively rolled out across commodities and is reported to be significantly more advanced than that of many trading partners, although it still needs improvement to be fully integrated.

Establishment audits uphold the integrity of the system, but data could be used more effectively

US audits of AEMIS have found that the establishment-specific audits conducted by the department ensure that operators meet the regulatory requirements of the system, including ensuring that non-compliance is identified and addressed through corrective actions. However, the US also observed that the department should provide greater critical attention to implementation of sanitation programs to address product contamination⁴⁵. Industry recommended that the department could improve its use of hygiene indicator reporting to audit establishments remotely, to reduce resourcing for on-site visits.

"Instead of auditing, the department could use our hygiene indicators more. We have to produce our results in a systems audit anyway. These could be done online from anywhere, but instead DAWR charges us for a two day audit onsite. This is pointless."

Industry consultee

6.3 Trends

Technology could streamline and automate processes and save costs in inspections, verification and certification

Consultations revealed an enthusiasm to incorporate new technologies into AEMIS in order to streamline and automate inspections and verification, including to provide remote and agile resourcing rather than be solely dependent on the on-plant presence of OPVs or FSMAs for verifications.

"In 2019, it looks archaic, not using innovation. There is too much flying inspectors around."

Industry consultee

New technologies will also be particularly relevant in the context of an increasing divide between older and newer plants, and those embarking on plant upgrades. The challenge for AEMIS will lie in ensuring it can adapt to the model of such facilities, particularly where they may incorporate changes in processing practices and a vastly increased capacity for data capture and feedback. AEMIS also provides opportunities to meet trends in traceability requirements in livestock species, contributing to an increased capacity for genuine lifetime traceability.

Industry bodies and companies have conducted some research into technological innovations, including assessing the feasibility of a multi-sensory automated offal inspection station (AMPC Project Code 2016-1003). However, it appears that such investigation has been limited.

⁴⁵ USDA Food Safety and Inspection Service, 2014, Australia – Final Audit Report, p12

Ideas raised during consultations included:

- // scanning and camera technology to enable ante-mortem inspections to be conducted remotely, to automate hands-free visual post-mortem inspection to reduce contamination, and to automatically move carcasses to the retain rail so the OPV can look at them at a suitable time without slowing the chain
- // voice recognition technology through which the inspector gets advice and can record observations hands-free
- // automating labelling through linkages with MICoR to meet importing country requirements.

It is noted that equivalence would need to be reached with importing countries, and that this process can be protracted when Australian technology is more advanced than markets.

“Australia is far ahead of many countries and quite different in terms of our models. For example, it took us 30 years to convince (a key market) that EXDOC is a great system. So convincing other countries that technologies like smart glasses are working properly will be a challenge.”

Department consultee

Animal welfare concerns may affect ante-mortem inspections

Growing concerns about animal welfare in this⁴⁶ and other sectors, particularly live animal exports, may have a flow-on effect that increases government attention to ante-mortem inspections. In response to the *Review of the Regulatory Capability and Culture of the Department of Agriculture and Water Resources in the Regulation of Live Animal Exports*⁴⁷ (the Moss Review), the department has established an Inspector-General of Live Animal Exports and Animal Welfare Branch for live exports⁴⁸. The implications of this for AEMIS will need to be monitored to ensure an evidence-based approach to assessing suitability of animals for slaughter and welfare management that is balanced against community expectations.

6.4 Risks

A failure to systematically capture, integrate, analyse and share data from AEMIS will limit transparency and traceability along the supply chain

While data capture has improved across all phases of the system, it is not integrated, complete nor being used to the optimal extent along the supply chain to inform production practices and national herd health, processing efficiency and effectiveness, and advocacy to markets.

This review was repeatedly told during consultations that there is significant potential for improved real-time data capture, integration and use against agreed metrics as part of the inspection and verification process.

⁴⁶ For example, there was significant public concern following a report by the ABC in October 2019 alleging mistreatment of racehorses sent to slaughter at export facilities. The department worked with state authorities to investigate the allegations: <https://www.abc.net.au/news/2019-10-18/slaughter-abuse-of-racehorses-undermines-industry-animal-welfare/11603834> (accessed 25 October 2019)

⁴⁷ P. Moss, 2018, Review of the Regulatory Capability and Culture of the Department of Agriculture and Water Resources in the Regulation of Live Animal Exports

⁴⁸ D. Littleproud, 2018, Government Response to the Moss Review

While data is captured on total carcase condemnation, there is no systemic capture of data on gross abnormality and partial carcase and offal condemnations, nor is data consistently used by the department to take a risk-based approach to regulation. Processor feedback to livestock producers is also inconsistent.

AAOs employed by third party providers are offering data collection systems and services, and the department is increasingly being asked by plants to collect data as part of its cost-efficiency services.

Better data capture and use could be used to enhance AEMIS, and to contribute to improvements along the whole supply chain by providing:

- // real-time data for government to monitor trends against agreed benchmarks and thresholds to take a risk-based approach to regulation, and pre-empt and address issues, reducing the need for physical inspection, and to cut costs
- // evidence to markets in support of Australia's demonstration of comparability, including equivalence and compliance with technical requirements, for audits and negotiations of FTAs
- // insights for improved plant management, including for information on yields and hygienic meat production
- // feedback to livestock producers and feedlots on animal welfare and animal health as it affects meat and offal
- // insights into animal health in Australia for evidence-based risk management.

The Rural R&D for Profit program "Health for Wealth" is working towards capture, recording and use of this data through species-specific national electronic feedback systems. Success factors include:

- // relevance of datasets for use by government, livestock producers, processors and markets
- // accuracy in data
- // training in capture and analysis for vets, inspectors and/or plant staff
- // development of a standardised reporting framework
- // development of systems.

Proposals have included improved operability and integration of existing national data systems and alignment with sector-wide approaches such as livestock identification. These, and the potential of other emerging technologies, such as distributed ledgers, could be explored by industry and government, albeit with consideration of data ownership and other related issues. It is noted that these ideas are not new, and analysis needs to be undertaken to understand what the impediments have been to date.

6.5 Recommendations

Recommendation 4

That industry and government increase collaboration to improve data collection, integration, analysis and communication to monitor trends on audit and inspection outcomes and market access issues, to improve system performance and compliance and support risk-based approaches that reduce regulatory burden. Data captured can also contribute to whole-of-supply chain improvements and transparency, including on- and off-plant process efficiencies, evidence-based market access, and improved livestock production practices and national herd health.

Optimising the targeted collection, integration, analysis and communication of data through both current and emerging technologies and practices will be vital to ensuring that AEMIS stays fit-for-purpose and evolves as necessary to contribute to a whole-of-supply chain approach that maximises Australia's market access and marketability. Ensuring the utility and opportunity presented by increased data collection is then required to facilitate innovation in processes related to the inspection system itself. This then can be used to facilitate the department's objectives to build greater cooperation and trust with importing countries through international cooperation arrangements.

Further, using such data can assist greatly in improving production practices which could have a significant cost-saving to the whole supply chain. These ideas are not necessarily new, however an overarching, coordinated and concerted effort to effectively capture this opportunity has not yet been implemented and is required as a matter of high priority.

Implementation considerations

This project should be focused in its purpose to minimise duplication and build upon existing data collection efforts, as well as ensuring that data collection is efficient, cost-effective and fit-for-purpose.

This recommendation involves significant implementation considerations, including:

- // detailed analysis of the user requirements and value of improved data
- // the development of new IT infrastructure or improved use and integration of existing platforms, as current systems are considered to be insufficient with regards to this recommendation
- // navigation of intellectual property and privacy considerations resulting from the socialisation of the collected data
- // the added level of inter-government collaboration required as State and Local governments, in addition to the Department of Agriculture, will need to be involved
- // assessment of the investment required by government and industry, based on the above, including returns.

Recommendation 5

That industry and government continue to prioritise research and development into inspection processes which contribute to market access, product integrity, food safety, and animal welfare outcomes, with consideration given to new technologies and automation.

In support of, and informed by, Recommendation 4, industry research and development bodies, particularly AMPC and MLA, are encouraged to continue to pursue an aspirational portfolio of work to position industry to maximise its market access and commercial returns. An AMPC and MLA collaborative approach to food safety is encouraged, taking both risk- and opportunity-based approach to identify priorities for their detailed strategies and workplans. It is recommended that industry identify priorities and lead this initiative, supported by government as necessary. It is understood that the proposed amendments included in the Export Control Bills Package are intended to facilitate innovation without burdensome legislative amendments.

Recommendation 6

That the department engage third party providers in governance mechanisms and provide direct feedback on performance during the MEVS weekly meeting between the OPV and the establishment management.

It can reasonably be anticipated that third party providers will play an increasingly important and prominent role in AEMIS and the provision of services to the system (particularly if Recommendation 1 is accepted and implemented). On that basis, it is vital that they are included to a much greater degree in consultation, communication and governance mechanisms into the future. This will ensure that they have the opportunity to provide the highest level of regulatory-related service to the sector. Policies and guidelines should be updated to reflect this change as required.

It is noted that an initial governance meeting between third party providers and the department was held in September 2019, following preliminary feedback from this review.

Implementation considerations

MEVS weekly meetings between OPVs and establishments include discussion of issues beyond inspection verification. Due to commercial-in-confidence and privacy considerations, it is therefore not considered appropriate for third party providers to attend MEVS weekly meetings in their entirety, however, they should be involved in the verification elements at a minimum, along with any other relevant agenda item. It is recommended that third party providers be engaged through existing MEVS weekly meetings rather than creating a new mechanism, as additional duties for OPVs may result in increased costs for industry.

7.0 PROJECT OUTCOMES – MARKET ACCESS

| | |
|-------------------------|--|
| Key findings | <ul style="list-style-type: none"> / Market access has been maintained since AEMIS was introduced, with no whole-of-market closures and no inspection-related point-of-entry rejections of export consignments. However, there has been a limited number of rejections for other technical barriers to trade. / New free trade agreements and technical market access protocols, including with many of Australia’s top 10 markets for meat and meat products, have expanded market access. |
| Trends and risks | <ul style="list-style-type: none"> / Geopolitics and anti-globalisation are increasingly influencing trade, with growing frequency and unpredictability of non-tariff measures. / Consumer demand for premium product is growing, while competition for Australia’s traditional markets is also on the rise. / Ensuring Australia’s competitive advantage will require a collaborative, strategic and agile approach by industry and government. / Government and industry body resources are constrained. |
| Recommendations | <ol style="list-style-type: none"> 7. That government and industry, through EMIAC, develop rolling annual workplans which define shared priorities for market maintenance and expansion. These annual workplans should be used to inform market access resourcing requirements, particularly for technical negotiations by government. 8. That the department and industry collaborate to monitor trends in point-of-entry rejections for product from Australian meat and meat product exporters, in support of Recommendation 4. |

7.1 Design

AEMIS was designed with a strong focus on maintaining, promoting and expanding market access for Australia’s meat and meat product exports. The ECRP included an initiative to ensure importing countries accepted the reforms under AEMIS, based on scientific data, with the following objectives:

- // “improve market access and more rapid response to market access opportunities/constraints
- // increase industry and AQIS understanding of market access requirements and involvement and engagement in market access activities
- // ensure protocols are developed under a partnership approach between AQIS and industry
- // prioritise market access issues and seek to resolve these or develop solutions for resolution
- // development of a strategy to ensure agreed reforms are accepted by importing countries”⁴⁹.

⁴⁹ Department of Agriculture, Fisheries and Forestry, Export Certification Reform Package Meat – Final Report, June 2011, p8

The department negotiated with importing countries to demonstrate that AEMIS met their requirements for inspection, verification and certification to provide assurance that exports comply with technical requirements for food safety and integrity and non-technical measures.

The department facilitates market access in six key ways:

- // supporting the Australian Government's approach to influence a global trade system that is open, inclusive, rules- and science-based, and anti-protectionist, particularly influencing the global policy agenda for agriculture
- // working with other government agencies and industry to maintain, improve and expand market access through free trade agreements and technical market access protocols that are science-based, commercially viable and underpinned by strong biosecurity
- // developing and maintaining the legislative, regulatory and policy framework that governs the export meat system
- // informing industry of importing country requirements, including updates, published on MICoR
- // compliance with importing countries' requirements for food safety and animal health
- // working with industry to manage and resolve trade disruptions.

Government-to-government arrangements are complemented by market access advocacy, marketing and direct engagement with importers and importing country authorities by industry bodies and establishments themselves. For example, AMIC, MLA and Australian Pork Limited are all extensively involved in market access issues, including coordinating technical working groups on trade policy.

EMIAC is the primary mechanism for engagement between the department and the export meat sector on technical market access issues. When AEMIS was introduced, the department established a Memorandum of Understanding with AMIC.

7.2 Implementation

Continued and improved market access remains the primary indicator of success for AEMIS

During consultations, industry and government presented a common position that market access remains the fundamental purpose of AEMIS. It has been the primary reason determining which model of inspection plants have selected and a key influence on whether establishments consider the system offers value for money.

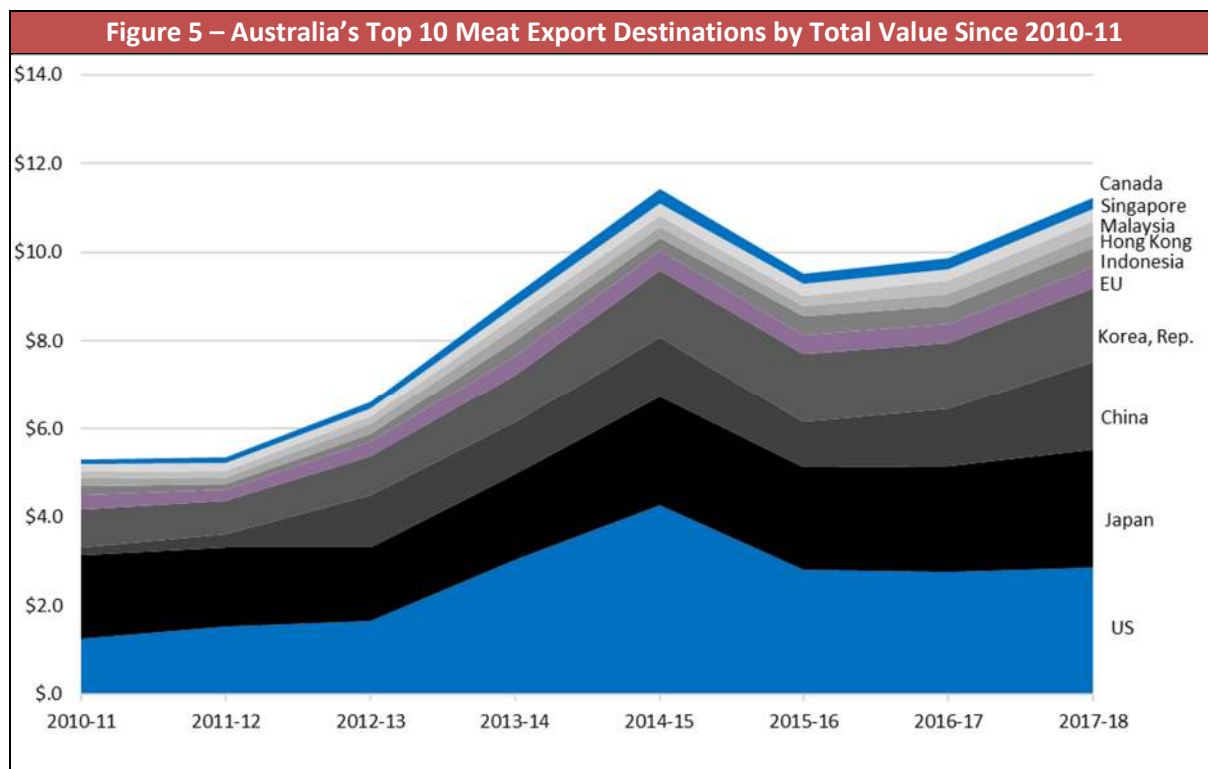
It is noted that issues relating to market access are broader in scope than AEMIS. This review has assessed this pillar based on indicators directly related to AEMIS, with consideration of the global trade context and interdependencies with broader market access issues.

Market access has been assessed in three ways:

- // volumes and value of Australian exports over the period
- // maintenance of market access, including incidence of market closures and point-of-entry rejections, and the agility of industry and government to resolve issues with markets
- // expanded access to markets through trade agreements and improvements to protocols.

Australia's total meat exports have grown since the introduction of AEMIS, with record throughputs largely driven by drought and depreciation of the Australian dollar

Australia is the world's largest exporter of sheepmeat and third-largest exporter of beef and veal, underpinned by a reputation for safe and high-quality product. Australia's meat exports have grown in both value and volume since the introduction of AEMIS, largely as a consequence of significant increases in throughput due to drought, a weaker Australian dollar and increased global demand, resulting in strong trade results for meat exports since 2010-11⁵⁰. Between 2010-11 and 2017-18, the average annual value of Australian meat exports increased by 10.6 per cent per annum (on a compound average annual growth rate), from \$7.27 billion⁵¹ to \$13.31 billion, driven by growth in demand from the United States and China. In absolute dollar terms, exports to China grew substantially, from \$163 million in 2010-11 to \$2 billion in 2017-18, a 12-fold increase of \$1.85 billion. This moved China from Australia's eighth largest export destination to third largest. US demand grew from \$1.25 billion to \$2.84 billion, constituting approximately a quarter of Australia's meat exports on average, and contributed to the US replacing Japan as the largest importer of Australian meat, up from second place⁵².



It is important to note that over this period the Australian dollar depreciated by 23.5 per cent relative to the US dollar (down from USD \$1.03 in 2011–12 to a low of USD 0.67 in 2018-19) and is responsible for a sizeable component of the total increase in value, as opposed to greater meat prices or greater volume.

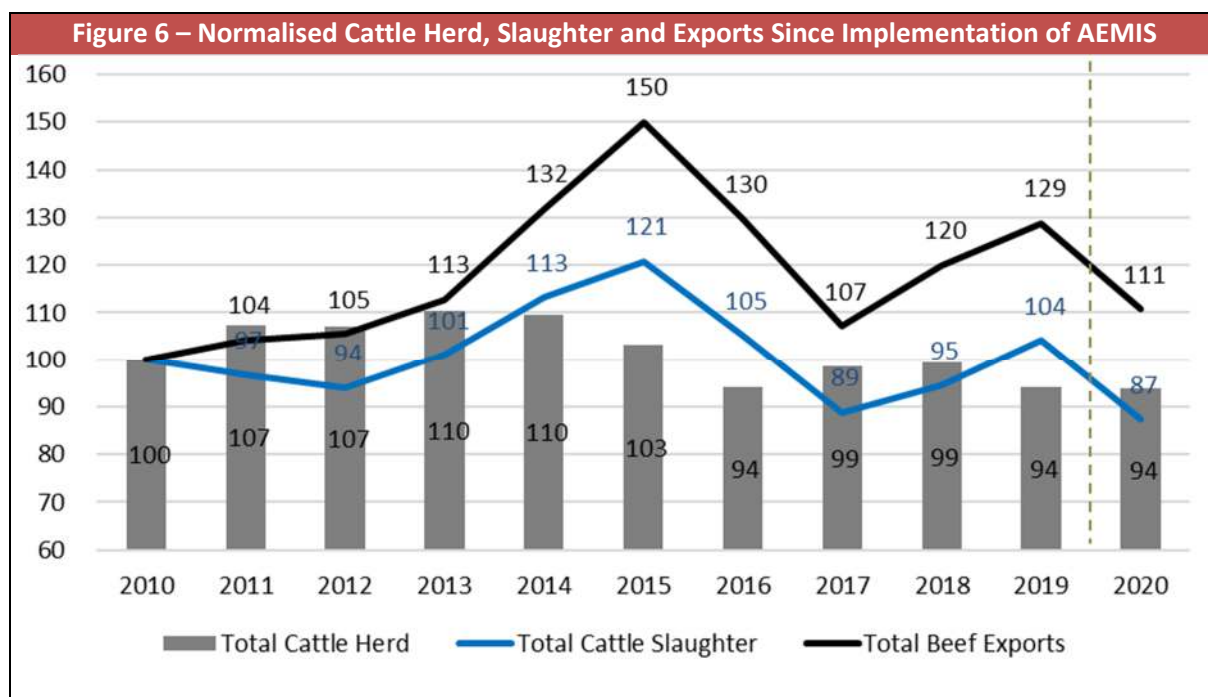
⁵⁰ UN Comtrade Database, <https://comtrade.un.org/>, [accessed 27 September 2019]

⁵¹ Dollar values quoted are Australian dollars, unless otherwise indicated.

⁵² *ibid*

In terms of volume, Australia’s total meat export volumes have grown substantially since the introduction of AEMIS: from 1.42 million tonnes in 2011-12 to 1.87 million tonnes in 2018-19⁵³, representing a 32.4 per cent increase (4.1% compound annual average growth)⁵⁴.

Figure 6 shows the normalised values of the national cattle herd, total cattle slaughtered and tonnes of beef exports (which represent approximately 70 per cent of export meat tonnage). This graph shows the declining national herd and growing export volumes since the introduction of AEMIS. This trend is forecast to reverse during the 2020 financial year and negatively impact processor revenues and profit margins⁵⁵.



Market access has been maintained, but AEMIS was refined to meet EU requirements

As previously noted, the EU notified the Australian Government in 2012 that it would not recognise company-employed authorised officers due to the risk of a lack of independence, resulting in the introduction of the third party-employed AAO model. However, this did not cause a break in exports to the EU as by the time of this decision, no plant exporting to this market had finalised its transition to company inspectors. It nonetheless caused significant expense and frustration to industry and remains somewhat of a sore point in department-industry relations. The EU’s decision demonstrated several key issues: that trade agreements do not occur on a commodity-by-commodity basis but rather are influenced by broader considerations, nor are they made purely on the basis of science. Perhaps most importantly, it demonstrated that the department was overly confident of the outcome of negotiations, encouraging industry to commit resources before the EU had made its final ruling.

⁵³ Australian Government, Department of Agriculture, Australian Red Meat Export Statistics, <http://www.agriculture.gov.au/export/controlled-foods/meat/statistics>, [accessed 28 September 2019]

⁵⁴ *ibid*

⁵⁵ ABARES, 2019, Agricultural commodities: June quarter 2019, Australian Bureau of Agricultural and Resource Economics and Sciences, Canberra

Likewise, while the department had ensured the initial design of AEMIS included an FSMA at the end of the chain to meet US requirements, it communicated to industry a confidence that the US would remove this following the implementation of AEMIS. In June 2014, while a US audit of AEMIS was being finalised, the department wrote to FSIS asking for approval of a proposal to introduce Departmental FSMA (DFSMAs), an option in which the department would directly pay third party providers to provide AAO services. DFSMAs would have been contracted to, and paid directly by, the department⁵⁶. However, US policy⁵⁷, reflected in domestic industry approaches, and pressure from US industry and lobby groups, has ensured that carcase-by-carcase inspection by government FSMA remain a US importing country requirement, reaffirmed in audits in 2013, 2014, 2016 and 2018.

A small proportion of point-of-entry rejections of consignments have occurred but have not been related to post-mortem inspections under AEMIS

While there have been no market closures, a small number of point-of-entry rejections of export consignments have occurred. Many point-of-entry rejections are dealt with directly between the importing country and the exporter, such as when product is affected by failures of shipping container refrigeration on the export journey. Usually importing countries only notify the department of a rejection when they request an investigation.

From 2015 to 2018, there were 39 point-of-entry rejections that required a departmental investigation, with a further five alerted in 2019⁵⁸. Issues include labelling defects, poor product and packaging condition. Rejections were also made for contamination, including zero tolerance contamination to the US, which the department considers unrelated to post-mortem inspection as it should be identified and resolved during carcase dressing, especially at the US-mandated final trim Critical Control Point (CCP) in the establishment's HACCP system (subsequent audits by the US noted improvements in performance in this area⁵⁹). These issues have been dealt with through the combined efforts of the department in Canberra and at market, of industry bodies and establishments themselves; in many instances, adequate assurance was provided to the importing country resulting in the consignment being released into commerce.

There have been other establishment de-listings as a result of importing countries' requirements, but the department has advised that these have not been linked to meat inspection systems of the establishments, nor to post-mortem inspections.

While industry and government work closely to resolve these issues, industry has raised concerns that the department does not always alert them to emergent, anticipated changes in importing country approaches before they are formally introduced, sometimes resulting in preventable rejections if they are implemented with little notice. It is noted that the department is not always alerted by markets either.

AEMIS has proven flexible to meet importing country requirements, but the complexity is growing

Importing countries' technical and non-technical requirements have changed substantially since the introduction of AEMIS. These are communicated by the department to industry through Meat Notices, Market Access Advices and on MICoR.

⁵⁶ G. Read, Letter from Department of Agriculture to FSIS, 10 June 2014

⁵⁷ United States Code of Federal Regulations Title 9, Section 327.2

⁵⁸ Department of Agriculture, 2019, Point of Entry Register Summary 2015–2019 YTD (De-identified)

⁵⁹ Letter dated 27 August 2014 from Department of Agriculture and Water Resources to FSIS in response to Australia Final Audit, US FSIS, 2014

Since 2014 when MICoR was updated, 352 Market Access Advices have been notified, ranging from changes to halal certification to bilingual labelling to new microbiological testing regimes. Some industry participants in the review called for more timely updates of MICoR. In addition, some establishments raised concerns that the flexibility of AEMIS, with its variations on inspection and auditing models, can require additional advocacy by the department to provide assurance to importing country auditors.

AEMIS has been operating in a context of new trade agreements and protocol improvements which have expanded market access, alongside growing competition

Australia's top 10 meat export markets are the US, Japan, Republic of Korea, China, the EU, Indonesia, Hong Kong, Singapore, Malaysia and Canada. Since 2011, the Australian Government, with support from industry, has negotiated and signed new free trade agreements with more than half of these markets: ASEAN-Australia-New Zealand FTA (Indonesia – 2012, all signatories – First Protocol amendment 2015), Malaysia (2013), Korea (2014), Japan (2015), China (2015), Indonesia (2018, not yet in force) and Hong Kong (2019, not yet in force). In addition, the Comprehensive and Progressive Agreement for a Trans-Pacific Partnership (CTPP-11), which came into effect on 30 December 2018 includes gradual tariff reductions for beef exports to Japan, Canada and Mexico. The Australian Government has also influenced the WTO's Trade Facilitation Agreement, reducing red tape and compliance costs for exporters, and contributed to the 2015 WTO agreement to eliminate agricultural export subsidies⁶⁰. Agreement to finalise the Regional Comprehensive Economic Partnership was also reached by 15 of 16 Indo-Pacific country members on 4 November 2019.

The FTAs not only introduce tariff reductions, but “provide a framework to deal with barriers stemming from differences in labelling, standards and other regulations”, including forward negotiating agendas and work programs to allow the FTAs to evolve with global trade trends⁶¹. The effect of these FTAs can be marked: exports of fresh or chilled Australian boneless beef to the Republic of Korea grew by more than 50 per cent and to Japan by more than 20 per cent between 2014 (before the FTAs came into effect) and 2016.⁶² The MLA estimates that the benefits of these North Asian FTAs, combined with China, will result in \$20 billion in extra value for the Australian industry over the next 20 years⁶³.

One of the biggest setbacks to market share has been with the EU, which announced in 2019 that it would allocate 41 per cent of the 45,000 tonne grain fed beef quota to the US, rising to 78 per cent over the next seven years. Australia will have to compete alongside New Zealand, Argentina and Uruguay to capture the remainder, in what is a high-paying beef market for Australia, totalling \$238 million in 2018.

The Australian Government commenced FTA negotiations with the EU in July 2018 and the red meat and livestock industry taskforce is calling for the elimination of quotas and tariffs⁶⁴. While the UK remains the major destination for Australian meat exports to the EU28 (including the UK), its share has fallen since 2011 and the share of exports to the EU27 (primarily to or through the Netherlands) has increased from a low base to the point that it was almost equivalent to exports to the UK in 2017.

⁶⁰ Australian Government, Foreign Policy White Paper, p55

⁶¹ Ibid, p60

⁶² Ibid, p59

⁶³ <https://www.mla.com.au/prices-markets/overseas-markets/market-access/>

⁶⁴ <https://dfat.gov.au/trade/agreements/negotiations/aeufta/submissions/Documents/red-meat-and-livestock-industry-taskforce-eufta-submission.PDF>

The UK's exit from the EU would create new opportunities for Australia to improve its current market access to the UK, which the Australian Government has expressed a willingness to pursue through an eventual FTA. However, since current access to the UK market is governed by EU market access arrangements, which are subject to WTO disciplines and extant quota arrangements, it is not clear how the quotas in particular will be allocated between EU27 members and the UK post-Brexit. This matter is under negotiation in Geneva.

Market access has also been improved through additional listings of establishments, access for new products, and exemptions from barriers.

7.3 Trends

Geopolitics and non-tariff measures increase the complexity and unpredictability of trade

The Australian Government's *2017 Foreign Policy White Paper: Opportunity, Security, Strength* highlighted the growing influence of geopolitics on trade. The rise in nationalism, particularly as countries and communities face economic pressure and raise concerns about the benefits of globalisation, increases the potential for protectionism that could "damage economic growth and undermine the rules that support flows of trade and investment"⁶⁵. In addition, trade is being used as a tool for strategic influence and, in some instances, coercion on broader geopolitical issues⁶⁶.

This is being reflected in more stringent food safety and biosecurity measures and non-technical, non-tariff measures (NTMs), which are becoming increasingly common. This is seen to be particularly prevalent in emerging markets and those countries where consumer preferences are putting increasing pressure on individual governments' import requirements.

As the department noted in its *International Strategy 2016–2019*, this is making "maintaining access to markets and negotiating improved access conditions...increasingly complex and challenging"⁶⁷.

The economic impact is estimated to be significant. The Harris Report in 2016–17 found that non-tariff measures cost the red meat export industry over \$3 billion in lost export earnings⁶⁸. AMIC has advocated for joint government and industry action to remove some of the barriers, such as shelf life of frozen and chilled product; restrictions on establishment listing for specific export markets; port of entry requirements and port marking; and complex certification, among others.

Increasing demand from consumers, particularly in Asia and Europe, for premium products

Global consumer demand for premium imported beef and other meat is expected to continue to grow, particularly in Asia as China's economy shifts to become more consumption-driven, fuelled by continuing urbanisation and rising disposable incomes. By 2030, Asia could be home to a middle class of almost 3.5 billion people⁶⁹.

Consumers – and therefore customers and importing countries – are placing increasing emphasis on food safety, sustainability, ethics (particularly relating to animal welfare) and place of origin. This will require greater transparency and traceability of meat products along the value chain, particularly to meet demand from European markets, which will likely require data-driven innovation.

⁶⁵ Australian Government, Foreign Policy White Paper, p1

⁶⁶ Ibid p44

⁶⁷ Department of Agriculture and Water Resources 2016, International Strategy 2016–2019, p1

⁶⁸ <https://amic.org.au/wp-content/uploads/2019/05/FederalElectionKeyMessagesFINAL-2.pdf>

⁶⁹ Brookings Institute, quoted on p29 of Foreign Policy White Paper

Australia is well placed to meet the demands for quality and animal welfare requirements, with superior food safety, traceability protocols and unique quality grading systems, through programs such as Livestock Production Assurance (LPA) and Meat Standards Australia (MSA).

The pork sector is monitoring the spread of African Swine Fever and the potential market opportunities that may arise for Australia's safe product. However, given the intensive nature of the sector, it could take two years to scale up production and processing, and importing country requirements would need to be monitored in readiness.

Increasing competition for traditional markets

While Australia continues to position itself as a supplier of premium product, built around a reputation for safety, integrity and quality, competition for our traditional markets is increasing from the US, New Zealand, Argentina, Brazil and Uruguay. The South American competitors are increasingly accessing markets with cheaper product that is improving in quality and consistency.

In addition to the success of the US in capturing EU quotas, outlined above, the US is also posing strong competition in Japan, to which Australia is the dominant imported beef supplier. Chilled beef imports from the US have risen significantly in the past year. This is largely as a result of the safeguard tariff snapback on frozen beef, which lasted until the end of the Japanese fiscal year on 31 March 2018. However, under the recently concluded TPP-11, Japan's beef import tariffs for member countries, including Australia (but not the US), will be reduced. The US and Japan now intend to commence bilateral FTA negotiations.

The Chinese market has also seen new entrants. In 2018 alone, eight new supplier countries began exporting beef to China, with Australia facing particular competition from Argentina, Brazil, New Zealand, Uruguay and the US⁷⁰.

New models of trade may require new approaches to verification and certification

As globalisation progresses and e-commerce is increasingly used to facilitate cross-border exchange and to access consumers directly, including demand for retail-ready and ready-to-cook products, new models of trade may emerge that require amendments to AEMIS.

For example, Singapore is emerging as a meat inter-modal and re-export hub. In September 2019, the MLA, with Enterprise Singapore and PSA (which operates the Singapore Port), issued an invitation for expressions of interest from businesses to assess the commercial viability and barriers to using Singapore as a sea-to-air distribution and value-adding hub⁷¹. This builds on the bilateral agreement between New Zealand and Singapore, signed in May 2019, through which New Zealand companies are using Singapore as a base to access EU and Asian markets. The two countries will cooperate in the development of international food standards in support of these arrangements. This has included New Zealand, Singapore and the EU developing a protocol allowing air-freight chilled lamb from New Zealand to be re-packed in Singapore and sea-freighted to the EU.

Such models would require consideration of the risks associated with government verification and certification to an intermediary market, with less line of sight on final destinations and their importing requirements.

⁷⁰ Meat and Livestock Australia, 2019 Market Snapshot: Beef and Sheepmeat – Greater China (August 2019)

⁷¹ <https://www.mla.com.au/news-and-events/industry-news/singapore-emerging-as-red-meat-intermodal-and-re-export-hub/>

“In countries like China and in South East Asia, we’re seeing smaller retail-ready export packages being exported to them. The online shopping phenomenon can see people have meat shipped to them overnight and have a retail ready package delivered to their door within 24 hours. To open this kind of trade up, we need to do more testing. How can we make health certificates cheaper to accommodate these smaller packages?”

Industry body consultee

Halal certification is a complex growing area of demand

Halal-certified meat and meat products are in growing demand, but certification requirements vary significantly between markets. Under the Terms of Reference for this review, Palladium was tasked to consider this issue. The department requested that consultation on this fall under the umbrella of the regulatory impact statement process underway, and feedback offered by industry on the effectiveness of the system was minimal.

7.4 Risks

Industry and the department do not have an agreed workplan for maintaining and enhancing market access for meat and meat products, informed by a coordinated industry position on priorities

Since AEMIS was introduced, the Australian Government has released its Foreign Policy White Paper in 2017 and the department has been guided by the Agriculture Competitiveness White Paper and an International Strategy 2016–2019. For the meat sector specifically, the joint government-industry Meat Industry Strategic Plan (MISP) 2020 describes broadly an emphasis on reducing economic and technical barriers to trade and marketing and promotion to developed and developing markets, with little detail. The MISP for 2030 is being developed.

Industry and government agree there is no sufficient strategy and plan to guide collaborative efforts to address agreed priorities, although individual organisations have their own plans. (For example, AMPC and MLA have detailed plans outlining research in areas such as food safety and market access). Key to a collaborative approach is a clearly defined set of priorities from industry and both the Department of Agriculture and DFAT noted that a sector-wide view is vital to their roles. EMIAC is considering a process for prioritisation of market access issues, led by the department and AMIC. At the same time, AMIC is coordinating industry-government working groups on trade with China and halal certification.

Nonetheless, while work has begun in this area, the department argues that the relative importance of issues for industry needs to be further refined, noting that this would be an input to government planning, rather than a directive. While it could be expected that such a workplan would not be publicly available in order to protect Australia’s national interest, the absence of one could lead to a lack of agreed priorities to guide the allocation of limited human and financial resources. This could result in effort being directed to emergent and urgent issues at the expense of strategic, longer-term issues and approaches that may have greater market access and commercial benefit for the sector as a whole.

“The departments are on a high road to no end, if they push back on a trade agreement, they may lose market access, and if they don’t push back, industry slams them for not looking after their interest. The solution is to involve industry in these conversations.”

Industry consultee

Complex trade context and resource pressures call for agile, assertive and coordinated trade negotiation and market engagement to respond to market trends, opportunities and risks

During the consultations, industry participants called on the government to be more assertive and confident in trade negotiations to demonstrate the robustness of Australia's production and processing systems and to argue for simpler arrangements, in partnership with industry. A common theme presented is that government could more proactively pursue improved protocol requirements, with the belief that officials are reluctant to revisit agreements, even when opportunities present themselves. In addition, several stakeholder groups recommended greater coordination between the technical and policy staff of the department to inform these negotiations. It is noted, however, that given negotiations occur between governments, industry may not have a strong insight into the approaches of the department.

Industry bodies were positive about the collaboration with government, but alongside some processors, sought opportunities for increasing engagement to achieve practical solutions to negotiations by 'having people with skin in the game' involved. There has been general appreciation of the confidentiality surrounding government-to-government interactions on protocol negotiations. However, some stakeholders highlighted the opportunity to increase collaboration between industry, industry service providers and government, including the expanded network of agriculture counsellors at posts, to better utilise networks and in-country knowledge to achieve more positive outcomes.

Industry also called for close monitoring by government and industry bodies of changes in the importing requirements and inspection processes of markets, and concessions approved for competitor exporters. For example, some felt that the US approval of Denmark's visual inspection system was an opportunity for the Australian Government to pursue approval of visual inspection of Australian exports⁷².

The most effective allocation of resources for the market access outcomes sought requires detailed consideration particularly in light of budgetary pressures on Australian Government agencies and on industry bodies.

7.5 Recommendations

Recommendation 7

That government and industry, through EMIAC, develop rolling annual workplans that define shared priorities for market maintenance and expansion. These annual workplans should be used to inform market access resourcing requirements, particularly for technical negotiations by government.

This recommendation aligns with the principles of the ECRP that government and industry should take a partnership approach to prioritise market access issues and the rapid resolution of opportunities and constraints, underpinned by a strategy to ensure reforms are accepted by importing countries.

The annual workplans should align with the Australian Government's trade objectives and the MISP 2030 but provide greater detail on priorities for action. Progress on implementation would be reported through EMIAC, with updates made as needed to reflect changing priorities in the complex trade context. Government and industry should have mutual accountability for delivering on the workplans, with responsibilities for activities allocated to harness the diplomatic, technical and commercial skills of political, bureaucratic and business leaders.

⁷² USDA FSIS, Final Report of an Audit Conducted in Denmark 12 – 23 March 2018

Implementation considerations

Priority should be given to activities that meet or achieve the best balance of the following criteria:

- // have the greatest commercial return for the whole sector and therefore for the Australian economy
- // are most likely to be successful in markets, for the level of effort required
- // balance immediate market maintenance needs, particularly to address point-of-entry risks, with long-term opportunities to expand Australia's market access
- // require joint effort of government and industry to address.

Market negotiations should promote Tier 1 arrangements to trading partners, emphasising Australian standards, systems and animal health.

Given the constraints on resources and the requirement for strategic and agile responses to the market, it will be important for the department and industry bodies to consider the workforce profile required to maintain and expand market access into the future. This should consider the FTE level of effort, skills and experience required, particularly for technical negotiations by government. Should Recommendation 1 be approved, consideration could be given to reallocating government FTEs from inspections to market access, noting that this may have an impact on levies charged to industry and if so, would require consultation. Consideration should also be given to resources supporting industries beyond export processors such as the rendering industry and cold stores.

Recommendation 8

That the department and industry collaborate to monitor trends in point-of-entry rejections, for product from Australian meat and meat product exporters, in support of Recommendation 4.

The department should continue to systematically collect and report to EMIAC on point-of-entry rejections for Australian meat and meat product exports that require government investigations. This should be complemented by reporting from AMIC to EMIAC on rejections dealt with directly between establishments and importing countries, based on voluntary self-reporting.

Trends should be analysed for risks to market access and appropriate amendments to AEMIS should be made as required. Where possible, trends in rejections for competitor exporters of meat and meat products should also be monitored.

Implementation considerations

Both the department and industry have noted that while beneficial, the implementation of this recommendation presents significant complexities, particularly regarding data sharing. Further, given the existing efforts toward improved data collaboration, implementation of this recommendation should take care to avoid duplication of effort and build upon or incorporate existing initiatives where appropriate.

8.0 PROJECT OUTCOMES – FINANCE

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| <p>Key findings</p> | <ul style="list-style-type: none"> / Overall cost-savings have not been achieved based on the original AEMIS targets due in part to lower than forecast uptake of the AAO model and expansion of cost recovery by government. / Industry is concerned that cost-recovery is not efficient and thus continued to grow. Once accounting for inflationary effects, departmental expenses have remained relatively stable despite the transition of approximately 50% of establishments to AAO inspection. / An Auditor-General Report in 2019⁷³ identified an over-recovery of levies and under-recovery of fees, resulting in a partial cost shift of inspection services to broader industry, rather than the direct user. It also found there was not assurance that the department is recovering the efficient costs of their activities. / This has created a deficient price signal that has disincentivised processors to adopt the AAO model, affecting the competitiveness of third party providers, who have been unable to achieve anticipated economies of scale for commercial viability. / The department is modelling pricing for the 2019–2022 Cost Recovery Implementation Statement (CRIS) and has proposed three options to industry for consideration. This will be informed by an independent review of the costs of the department’s export certification activities. / In line with cost-recovery policy, the Cost Recovery Reserve is currently within the target of between 0 to 5 per cent. However, industry is concerned that it has been wound down through remissions to industry during a period of record throughput numbers, ahead of leaner times. |
| <p>Trends and risks</p> | <ul style="list-style-type: none"> / Major competitors such as Brazil and Argentina continue to increase their market access with a low-cost product of improving quality, with Australia’s competitiveness expected to continue to erode unless efficiencies are realised. This could be achieved through a combination of reduced input and processing costs, improved returns from yield, and price improvements from high-end product differentiation. / This review was conducted during a prolonged period of drought and high throughput for processors. In a return to wetter conditions and lower processor throughput, value-for-money of inspection services will likely be negatively impacted. / The Cost Recovery Reserve has deteriorated to a near zero balance during this period of high throughput. The forecast increases to the reserve are expected to occur during a period of reduced throughput and thus place a disproportionate burden on processors. |

⁷³ The Australian National Audit Office, Auditor-General Report No.38 of 2018–19 Performance Audit Report

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| Recommendations | <p>9. That government and industry consider the following recommendations during consultations on the Cost Recovery Implementation Statement: Meat export certification 2019-20 and the independent review of export certification costs:</p> <ul style="list-style-type: none"> a. That pricing Option 3 of the Cost Recovery Implementation Statement: Meat export certification 2019-20 consultation draft presents the most appropriate model, in which levy prices are rebased and a harmonised fee-for-service structure is in place, with all corporate overhead expenses associated with FSMA and OPVs recovered through fees charged to the user b. That the department undertakes more regular, transparent benchmarking exercises to ensure its charges are recovering the efficient costs of operations. |
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8.1 Design

The AEMIS cost recovery model is guided by the whole-of-government policy on charging, which defines efficiency and effectiveness of cost recovery

The Cost Recovery Implementation Statement (CRIS) for meat exports is required to align with the Australian Government’s Charging Framework⁷⁴ as it applies to charging for regulatory activities. This section of the review considers if AEMIS is efficient and cost-effective, using the terms defined by the Australian Government Cost Recovery Guidelines Resource Management Guide, No. 304⁷⁵, detailed in Table 3⁷⁶.

| Table 3 – Definitions Specific to Cost Recovery | |
|---|---|
| Term | Definition |
| Cost recovery fee | A type of government cost recovery charge used when a good or service or, in certain circumstances, regulation, is provided directly to a specific individual or organisation. |
| Cost recovery levy | A type of government cost recovery charge used when goods and services, but primarily regulation, are provided to a group of individuals or organisations (e.g. an industry sector) rather than to a specific individual or organisation. |
| Effectiveness of cost recovery | Relates to whether the cost-recovery model and related processes reliably measure and allocate costs to cost-recovery charges. |
| Efficient costs | The minimum costs necessary to provide the activity while achieving the policy objectives and legislative functions of the Australian Government. |

⁷⁴ <https://www.finance.gov.au/resource-management/charging-framework/>

⁷⁵ https://www.finance.gov.au/sites/default/files/australian-government-cost-recovery-guidelines_0.pdf

⁷⁶ Fit for purpose is defined in 12.2 Table of definitions

| | |
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| Efficiency of cost recovery | Relates to the proportionality between the costs of administering cost recovery and potential charges for or revenue from the activity. |
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A history of meat export cost recovery

The department began cost recovery in 1979. Table 4 provides an overview of the major changes in meat export cost recovery in Australia since then. To date, various forms of cost recovery, either partial or full, have been in place, with changes typically a result of either government acceptance of independent reviews such as the Beale Review, or in responses to external stimuli.

| Table 4 – An Overview of Meat Export Cost Recovery | |
|--|--|
| 1979 | The department started a 50 per cent cost recovery from users for most meat export activities. |
| 1988 | The department increased cost recovery to 60 per cent on 1 July 1988. |
| 1991 | On 1 January 1991, a full (100 per cent) cost-recovery arrangement was implemented by the department for recoverable programs. |
| 2001 | On 1 November 2001, the Australian Government implemented a 40 per cent temporary rebate on export certification charges |
| 2009 | As scheduled, the 40 per cent temporary rebate implemented in 2001 was terminated and the government returned to full-cost recovery through implementation of new export fees and charges. |

The 2008 Beale Review recommended a return to full-cost recovery in 2009

Alongside its recommendations to strengthen Australia’s biosecurity system including a proposal for a new National Biosecurity Authority (NBA)⁷⁷, the 2008 Beale Review was significant for its recommendations regarding cost recovery of export certification functions. The following recommendations informed the design of what would become AEMIS:

- // export certification functions should return to 100 per cent cost recovery as scheduled at the beginning of July 2009
- // the NBA should have the ultimate responsibility of recommending a cost recovery package which supports effective regulation
- // cost recovery should be subject to periodic external review to ensure efficiency
- // the government should increase budget funding for activities which support biosecurity-related technical market access for Australian exporters⁷⁸.

⁷⁷ The recommendation to establish the NBA was not accepted by the Australian Government.

⁷⁸ R. Beale, J. Fairbrother, A. Inglis & D. Trebeck, 2008, *One Biosecurity: A working partnership – The independent review of Australia’s Quarantine and Biosecurity Arrangements Report to the Australian Government*

Under the ECRP, a cost-recovery framework was designed, supported by a transition package

Under the ECRP, a Ministerial Meat Taskforce was tasked with identifying the most appropriate cost-recovery model for the delivery of meat inspection and export certification. This involved a 2011 independent financial evaluation by Ernst and Young of the fees and charges. Following further industry consultation, the fee model was designed to deliver the following outcomes:

- // full cost recovery of program operations
- // equitable distribution of the benefits
- // choice in the delivery of services, specifically the model will “fully recover the cost of services where an establishment chooses to continue with government inspection instead of AAOs”
- // tiered registration charges to reflect costs of effort (replacing a single registration charge)
- // tiered throughput charge against volume of animal processed (removing per capita charging against the number of departmental staff at an establishment)
- // adjustable model to reflect updated costs over time
- // performance-based structure that is shaped to target risk
- // consistency with the Cost Recovery Guidelines and the principle of ‘user pays’.

New export fees and charges to support a return to full-cost recovery were planned to start on 1 July 2009, however, the Senate passed a motion to disallow them. This motion was later rescinded, the reforms recommenced, and the new fees and charges commenced in December 2009. Funding of \$124 million was provided for the implementation of the ECRP, to run through to 30 June 2011. This package consisted of the following components:

- // \$85 million for fee rebates to assist exporters during transition, providing a 40 per cent offset of the full cost impact on export industries
- // \$16 million for reform of the regulatory and export supply chain, specifically the company quality management systems
- // \$26 million for meat inspection reform, focusing on the reduction in the number of departmental meat inspectors through simplifying post-mortem inspections.

8.2 Implementation

During the review, the department was concurrently developing the Cost Recovery Implementation Statement 2019–20, which it released for public consultation on 10 October 2019 as this report was being finalised. The department has also commissioned EY to conduct an independent review of the costs of the department’s export certification activities to be delivered in November 2019 after this report is submitted. Views provided by industry during consultations for the AEMIS Review and included in this report therefore do not reflect the proposed CRIS.

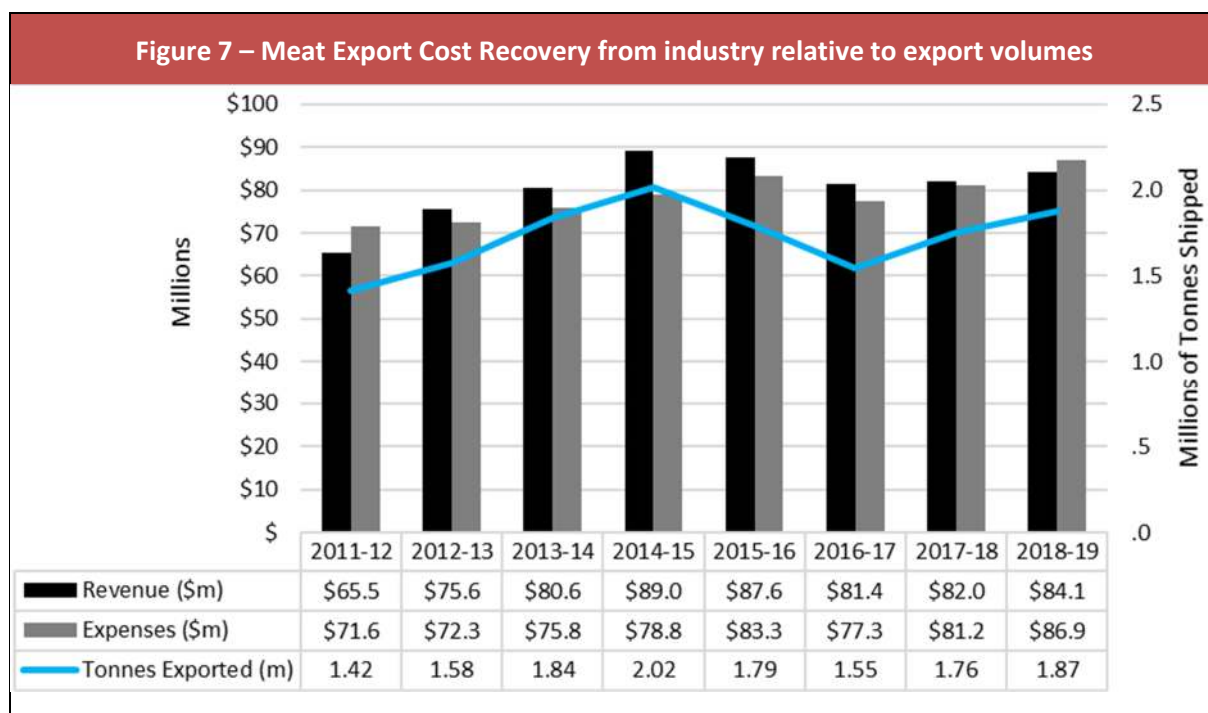
Overall cost savings have not been achieved under AEMIS

AEMIS was intended to offset the increased cost recovery through efficiencies – which were forecast to provide a reduction of regulatory costs to six agricultural export sectors, including meat, of around

\$30 million per annum from 1 July 2011⁷⁹. However, the expected cost reduction has not been achieved, with total expenses increasing from \$71.6 million in 2011–12 to \$86.9 million⁸⁰ in 2018–19.

Meat export cost recovery has increased on average during implementation, tracking changes in export volumes; however, inflation-adjusted departmental expenses have remained relatively stable

Figure 7 shows the department’s cost recovery expenses and revenue since the inception of AEMIS, overlaid with export volumes (the blue line). As illustrated, both departmental cost recovery fees and expenses have closely followed changes in export volumes. During 2018–19, departmental expenses increased by the largest amount since the introduction of AEMIS, increasing from \$81.2 million to \$86.9 million; this is the first year in which departmental expenses exceeded departmental revenue since 2011–12.



Accounting for inflationary effects, real export values have grown at a faster rate than the cost recovery expenses of government. Figure 8 shows export volumes and the normalised values of export prices, export value, and departmental costs associated with cost recovery, in constant 2012 dollars.

Between 2011–12 and 2017–18 and expressed in constant 2012 dollars, there has been:

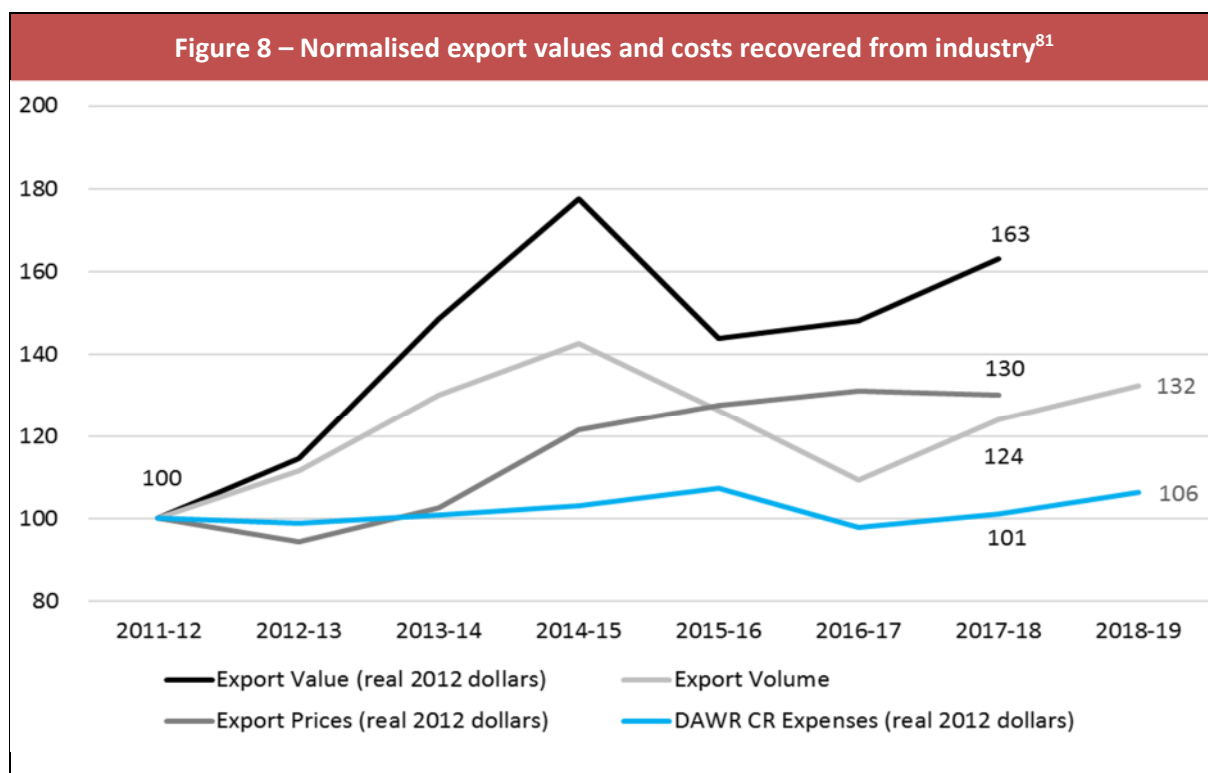
- // 63.0% increase in export value
- // 30.1% increase in export prices
- // 24.0% increase in export volume
- // 23.5% depreciation of the Australian dollar relative to the US dollar
- // 1.0% increase in cost recovery expenses.

⁷⁹ DAFF 2011, *Export Certification Reform Package Meat – Final report*, p3

⁸⁰ DAFF 2011, *Cost Recovery Impact Statement for the Fees and Charges for the Meat Export Program 1 October 2011 – 30 June 2012*; DAWR 2019, *Meat Export Cost Recovery 2018–19 Charging Review Expense Base*

The depreciation of the Australian dollar is responsible for much of the increase in export prices, which itself is responsible for much of the increase in total value.

Examining the 2018–19 year, only export volume and cost recovery expenses were available at the time of publication; total export value and prices were not available and have not been factored into analysis. During 2018–19, as previously noted, departmental expenses increased by the largest amount since the introduction of AEMIS, but more slowly than the increase in export volumes. Nonetheless, accounting for inflationary effects, departmental expenses have remained relatively stable. This is despite the transition of approximately 50 per cent of establishments to AAO inspection.



Meanwhile, the Cost Recovery Reserve has declined over time, in line with a change in policy, providing remissions to industry during a relatively prosperous period

The CRR has been maintained to smooth unanticipated changes in activity that cannot be managed by modifying expenditure alone. After AEMIS was introduced, the CRR reached a peak of 15 per cent of annual program expenditure in 2014–15, but a change in policy lowered the target balance to between 0 – 5 per cent. From 2015 to 2019, the CRR was drawn on to provide temporary remissions on fees and levies for some meat export charges. Figure 9 shows the cost recovery revenue and expenses from 2011–12, overlaid with the balance of the CRR as a percentage of revenue.

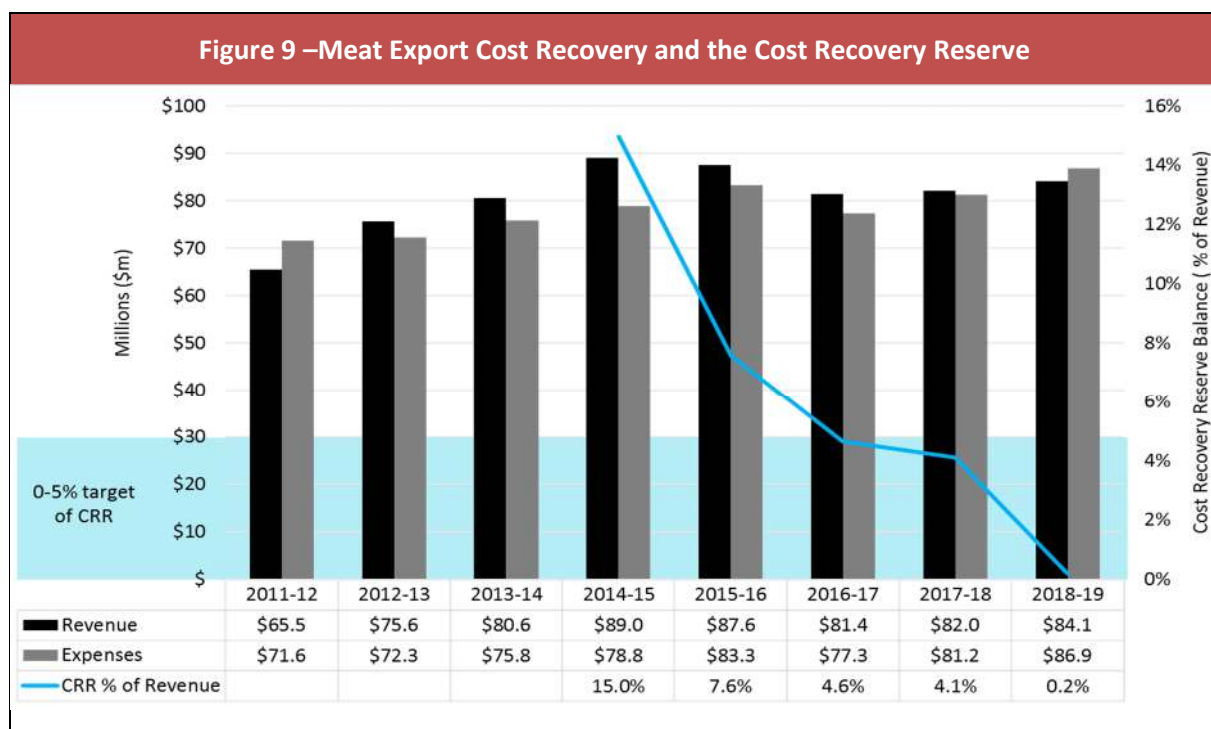
With data starting from 2014–15, the balance of the CRR declined from 15 per cent (\$13.3 million) to 0.2 per cent (\$169,504) for 2018–19⁸², declining sharply as expenses exceeded revenue.

⁸¹ Note that total export value was analysed, not the value captured by processors or any particular group.

⁸² Department of Agriculture 2019, Cost Recovery Implementation Statement: Meat Export Certification 2019-20, p17

While this reduction in the CRR has benefited industry through remissions and is in line with government policy, it comes at a time when throughput has been high and industry has experienced relative prosperity.

With processors facing leaner times ahead while the national herd is being rebuilt after drought, industry expressed concern that the CRR had been run down to this extent, rather than increased in preparation for the future. In the next four years, the department has forecast significant declines in throughput. For example, in Tier 2 establishments, beef volumes are forecast to reduce about 50 per cent from 6.2 million head to 3.3 million and sheepmeat volumes will decline from 24 million to 5.7 million – just under a quarter⁸³. Over this more constrained period, the consultation draft of the 2019–20 CRIS has budgeted small yearly increases in the CRR, averaging approximately \$500,000 per annum to \$2.2 million in 2022–23 (2%)⁸⁴.



The expected total cost savings of AEMIS has been negatively affected by a lower than expected uptake of the AAO model, exacerbated by the inequity of the charging structure

Since the introduction of AEMIS, up to and including the 2015–16 Cost Recovery Implementation Statement, all indirect expenses were recovered through cost recovery levies, including those relating to FSMA and OPVs, resulting in AAO inspection model plants paying for a portion of FSMA overheads.

The 2017 Meat Export Program Cost Recovery Arrangements Independent Review conducted by PriceWaterhouseCoopers found that, while the department’s charging structure was generally strong, there was “an imbalance between revenue and expense for some activities that will potentially provide less equity for industry participants”.

⁸³ Ibid, p34; Department of Agriculture and Water Resources, 2015, Cost Recovery Implementation Statement Food Exports Certification, 2015-16, p18-19

⁸⁴ Ibid, p17

Similarly, a report from the Australian Auditor General delivered during this review found that the department has “over-recovered costs through levies and under-recovered costs through fees”⁸⁵.

The under-pricing of FSMA has resulted in a deficient price signal: when the price charged for a good or service does not convey full information through which stakeholders can make accurate comparisons or alternative products or increase and decrease their quantity demanded⁸⁶. As the charges for an FSMA do not completely capture the total costs of deploying and managing those inspectors, a portion of their total expense is socialised across the entire industry through levy payments rather than contained within fee-for-service payments by the specific consumers of those services. Specifically, the traditional inspection model is being subsidised by the AAO model.

Some in industry expressed concern that further cross subsidisation is occurring, with domestic meat subsidising exported meat under the current pricing structure. This claim was not explored as part of this report and represents an area for further consideration.

“At the end of the day, there’s cross subsidising. The AAO model is subsidising the government inspection model. There’s no price signal, no economic incentive to move off that (traditional) model into company inspectors. They’re getting a sweetheart deal.”

Industry consultee

Industry questioned the efficiency of the department’s operations in light of the growing cost base, but there is no evidence to determine efficiency or inefficiency, underpinning calls for transparency

Some in industry believe that the department’s costs should again be partially subsidised if efficiency criteria cannot be proven or met, as government can only recover the efficient costs of its operations.

“DAWR isn’t meeting their efficiency requirements, so why should industry pay for this inefficiency?”

Industry consultee

The department considers itself as efficient as possible within government constraints, however no evidence or review has firmly established either efficiency or inefficiency. The Auditor-General Report No.38 2018–19 stated that “[the Department] has scope to improve the effectiveness of its cost recovery arrangements.... There is no assurance that entity charges recover the efficient costs of their activities, although [The Department] has benchmarked some of its costs”⁸⁷. As mentioned above, the department is currently reviewing its charges and is planning to revise them in 2019–20 to incorporate Auditor-General feedback.

In addition, the department has commissioned EY to undertake an independent review of the efficiency of the costs of its export certification activities, including for meat and meat product exports. As part of the review, EY will develop a benchmarking framework based on comparable public and private sector regulatory activities in Australia and overseas⁸⁸.

⁸⁵ The Australian National Audit Office, Auditor-General Report No.38 of 2018–19 Performance Audit Report

⁸⁶ Boudreaux, D, *Information and Prices*, The Concise Encyclopedia of Economics, <https://www.econlib.org/library/Enc/InformationandPrices.html>

⁸⁷ The Australian National Audit Office Auditor-General Report No.38 2018–19, p8

⁸⁸ Department of Agriculture and Water Resources 2019, <http://www.agriculture.gov.au/fees/cost-recovery/independent-review-cost-export-certification>

It is noted that benchmarking not only provides contestable and quantitative analysis of the efficiency of costs, but it also provides a stimulus for transparency and continuous improvement.

Another key element of transparency is reporting on budgets and AMIC reported that the EMIAC Finance and Staffing Sub-Committee had not received the budget for 2019-20 or reporting on 2018-19, as at November 2019.

Additional charges for export certification services have been included in cost recovery

In the 2018–19 budget⁸⁹, the government announced an expanded range of export certification activities provided by the department that would be cost recovered. From 1 July 2019, these activities include:

- // enforcement activities (such as investigations) that ensure compliance with Australian regulation and international import conditions
- // provision of scientific and technical advice to improve or maintain existing export markets, such as issues following pest or disease incursion
- // services provided by overseas counsellors relating to detained consignments and other issues with goods being held at border
- // indicative additional cost recovery expense will be \$23.7 million from 2019–20 to 2021–22 and \$7.9 million per annum indexed going forward.

The government also announced \$51.3 million from 2018–19 to 2021–22 and \$15.9 million per annum ongoing to drive agricultural exports and ensure continued growth and competitiveness. This proposed investment will fund the following activities:

- // six new agricultural counsellor positions globally, designed to strengthen relationships with trading partners and positioned where free trade agreements have been negotiated, to ensure the agricultural exports benefit properly from FTAs
- // 34 technical, food safety and market analysis experts to provide assessments needed to expand market access.

Industry concerned about the cost of services, but more positive about value-for-money

Plants running traditional inspection models had mixed views on the cost of FSMAs, ranging from ‘appropriate’ to ‘excessive’, with none interviewed perceiving them to be ‘cheap’ relative to alternative models. However, when examining the benefits relative to the costs, FSMAs were generally considered as being ‘appropriate’ or ‘good’ value-for-money. Two reasons dominated the value-for-money assessment: the outsourcing of workforce recruitment; and market access.

Workforce recruitment was a significant issue for particular processors, depending on the idiosyncrasies of the local labour market, and the ability to outsource these labour difficulties was highly valued.

⁸⁹ Department of Agriculture and Water Resources 2018, Portfolio Budget Statements 2018–19

In contrast to the FSMAs, OPV costs were perceived as being cheap relative to the regulatory services they provide. This opinion of OPVs was consistent across inspection model and meat type, with the exception of pork. The pork processors differed in their views for two reasons: firstly, the difference in model and ability to utilise a PAMI; and secondly, the comparatively limited exposure of most OPVs to pork meat, they are predominantly familiar with beef and sheep meat.

In addition, overtime costs were generally considered 'excessive' and the inflexibility of the charges in a variable industry resulted in much of the cost dissatisfaction. The department's minimum notice period for planned overtime, as well as the cost difference between planned and unplanned overtime, was considered counter to what is a seasonal and unpredictable industry.

"We have to lock in 15-minute increments. It's a very static system. But industry doesn't work like that. We have flexible hours. We might have a short day one day and have a longer day tomorrow. But then we're paying for a vet to go home early and then paying for overtime. The system should recognise that a working day is a bit more fluid."

Industry consultee

On-plant operations are more efficient

In addition, despite all the concerns raised, most processors – irrespective of which model they use – reported that on-plant efficiency has increased post-implementation of AEMIS. While difficult to quantify and isolate from other concurrent changes to production, companies that utilise AAOs have benefited from a combination of reduced costs, greater recovery of wholesome yield around partially condemned carcass parts and offals, and greater efficiency of throughput, almost without exception. For companies opting for traditional inspection, almost without exception respondents indicated that the cost-efficiency models and an improvement in inspector culture have had beneficial flow-on effects in on-plant efficiencies, ease of doing business and, ultimately, costs.

Industry concerns on audit extensiveness scalability

In the review's consultations with industry, some raised concerns of the extensiveness of audits with regard to establishment size. Suggestions were put forward for smaller establishments to receive less extensive and thus, less costly, audits to reflect their comparative size and risk relative to the industry.

While this appears logically consistent, sample size does not proportionately scale with population size in statistical sampling as used in established audit methodology.

For example, if Establishment A is 10 times the size of Establishment B, the necessary audit sample size to achieve confidence will actually be significantly less than 10 times. As a result, smaller populations have a larger proportion of their membership audited. This phenomenon is a consistent feature of assurance programs and not considered a fault in AEMIS or any associated audit program.

8.3 Trends

The department is undertaking consultations on the 2019–20 CRIS for meat export certification, which outlines further increases in departmental expenses and revenue

The department released the draft Cost Recovery Implementation Statement: Meat Export Certification 2019–20 on 10 October 2019 for a period of public consultation. Over the four-year forward period, expenses and revenue will continue to grow as shown in Table 4, with excess revenues contributing to the cost recovery reserve after a period of significant decline, as previously noted.

| Table 5– Department Expenses and Revenue ⁹⁰ | | | | | |
|--|---------|---------|---------|---------|---------|
| | 2018–19 | 2019–20 | 2020–21 | 2021–22 | 2022–23 |
| Revenue | \$84.1M | \$88.8M | \$90.8M | \$92.2M | \$94.0M |
| Expenses | \$86.9M | \$88.5M | \$90.1M | \$91.7M | \$93.4M |

The department is proposing pricing options to address imbalances in the current cost recovery model

Following the Auditor General’s review in 2019, the department developed new pricing models for cost recovery. Three pricing options have been proposed for meat export charges⁹¹:

- // Option 1: an equal uplift of 13 per cent on current prices (not the current legislated rate)
- // Option 2: reallocation of levy charges, with throughput charges increased and document levies reduced
- // Option 3: rebased levy price, harmonised fee-for-service, and all FSMA and OPV associated overheads incorporated into the FSMA and OPV fees.

Option 2 adjusts prices to better align with expenses, specifically, it reduces documentation expenses and increases throughput charged. However, the total split of funds recovered through levies and fee-for-service charges remains the same as option 1, as show in Table 6.

Alternatively, Option 3 attempts to align cost-centres with revenue by moving all corporate overheads associated with FSMA and OPVs from levy payments (paid by all of industry) to fee-for-service payments (paid for only by the user). Under Option 3, the overheads being moved and attributed into fee-for-service payments include items such as: telecommunications, ICT, Comcare, workplace relations, work health and safety, workforce acquisition and management, and payroll services. Palladium considers this attribution to be appropriate. These expenses total \$10.2 million.

⁹⁰ Department of Agriculture 2019, Cost Recovery Implementation Statement: Meat Export Certification 2019-20, p17; numbers have been rounded.

⁹¹ Ibid, p34

Table 6 – Levies and Fees as a proportion of expenditure⁹²

| | Option 1 | Option 2 | Option 3 |
|---------------|------------------|------------------|------------------|
| Levies | \$29.2M (33%) | \$29.2M (33%) | \$18.9M (21%) |
| Fees | \$59.3M (67%) | \$59.3M (67%) | \$69.5M (79%) |
| Total | \$88.5M | \$88.5M | \$88.5M |

Costs of FSMAs are increasing significantly, but staffing levels are forecast to decline

In terms of total annual fees, FSMAs are charged at \$204,936 under Option 3 compared with \$168,996 for Options 1 and 2 and \$117,489 under the current pricing structure (a 74 per cent increase). Similarly, OPVs are charged at \$273,456 under Option 3, compared with \$237,192 under Options 1 and 2, and \$182,394 under the current pricing structure (a 50 per cent increase). Given the price difference between Options 1 and 2 and Option 3, the cost of these overheads is estimated at \$2,995 for FSMAs and \$3,022 for OPVs per month per labour unit, or \$35,940 and \$36,264 on an annual basis.

However, staffing levels will decline relative to the 2015–16 CRIS⁹³, in accordance with the significant reduction in throughput forecast for the period. Drawing on the CRIS forecasts, demand for FSMAs for monthly and extra requirements will decline approximately 7.5 per cent, while planned and unplanned overtime will reduce significantly, down approximately 27 per cent. For OPVs, resourcing for monthly requirements is forecast to decline 9 per cent, while planned and unplanned overtime requirements will decline about 20 per cent. For both FSMAs and OPVs, it is worth noting that the proportion of overtime that is planned and unplanned has inverted. For FSMAs, overtime is forecast to be 73 per cent planned and 27 per cent unplanned, compared with 26 per cent and 74 per cent respectively in 2015–16; while for OPVs, it is forecast to be 82 per cent planned and 18 per unplanned, compared with 26 per cent and 74 per cent respectively in 2015–16.

International comparisons show Australia’s compliance and operating costs are higher than for other major meat exporters, in an increasingly competitive global market

Australian processors face high compliance and operational costs compared to our key international competitors. The Analysis of Regulatory and Related Costs in Red Meat Processing Report (October 2018) and Processing Cost Competitiveness⁹⁴ Report (November 2018) published by the AMPC identify and quantify the costs of red meat processing in Australia compared to Australia’s major international competitors – the US, Brazil, Argentina and New Zealand.

⁹² Ibid, p29

⁹³ Ibid, p35; Department of Agriculture and Water Resources, 2015, Cost Recovery Implementation Statement Food Exports Certification, 2015-16, p20.

⁹⁴ SG Heilbron Economic & Policy Consulting 2018, *Analysis of Regulatory and Related Costs in Red Meat Processing*

The key findings from the reports are that:

- // Australian Government regulated export inspection and certification costs in beef processing are:
 - // 3.4 times higher than in the United States
 - // 4.5 times higher than in Argentina
 - // 0.4 times, or 60 per cent lower, than in New Zealand.
- // Average costs per head of beef processing in Australia are:
 - // 18 per cent higher than New Zealand
 - // 24 per cent higher than the United States
 - // 75 per cent higher than Argentina
 - // double the costs of Brazil.
- // Of the costs incurred by Australia, more than 54 per cent are due to some form of regulation, with Australia having a significantly higher regulatory burden than its major competitors. This regulatory cost burden is approximately:
 - // 70 per cent higher than New Zealand
 - // double that of the United States and Argentina
 - // more than triple that of Brazil.
- // Our major competitors from the Americas have alternative arrangements with their governments for certification cost recovery:
 - // Brazilian processor costs are fully funded by their federal government
 - // Argentine regulators recover full costs, however they are allocated along the supply chain rather than solely on the processor
 - // US processors pay only for inspector overtime and special needs.

Industry is concerned with the impact of the department's costs on international competitiveness as Australia's major international competitors have lower costs of export inspection and certification. Much of industry expressed a desire for government support to remain competitive, on a level playing field, with suggestions that the entire cost of meat inspection and certification be funded by government. In response, the department provided two points for consideration: firstly, that the AMPC Analysis of Regulatory and Related Costs in Red Meat Processing Report does not include levy costs; and secondly, that inspectors' duties differ in the countries analysed, so a true like-for-like comparison cannot be made.

"We're a manufacturing industry, and our costs of production compared to our competitors is horrific. It's not just the salaries of inspectors and DAWR's fees. It's the loss in production and inconsistencies which are the greatest costs."

Industry consultee

Countries such as Brazil and Argentina have improved both market access and quality of product over recent years while still maintaining a lower cost of production compared to Australia.

At the time of writing, Australian cattle prices are approximately 50 per cent higher than Brazil, with a further 74 per cent premium on per kilogram processing costs. A recent example from September 2019 is the listing of 25 Brazilian meat processing plants (including 17 beef plants) approved by Chinese authorities, equalling a total of 89 Brazilian meat processing plants authorised in China compared to Australia's 47.

While the effects of African Swine Fever will likely see continued strong demand for Australian beef, and at near record high prices, Australia's total market share of Chinese meat imports will decrease due to price competition from Brazil, Uruguay and Argentina. As a result, Australian exporters have been focusing on premium markets, such as the US, Japan and Korea, as well as premium segments of the Chinese market. As discussed in Section 8: Market Access, this trend is expected to continue for the foreseeable future and may change the structure and pricing of the industry.

8.4 Risks

Competition with government could affect third party providers' viability and system sustainability

Third party providers are constrained in the current operating environment. Of largest concern is the department's 'poaching' of staff, which has a disproportionately large impact on a business that generates revenue through the provision of labour rather than meat products. This is of particular concern as a healthy and sustainable third party alternative is beneficial to industry through the offering of competitive services.

Many of the plants consulted stated that they had previously received a quote from a third party provider. Depending on the location of the plant and idiosyncrasies of the plant's operations, the quotes received were often only marginally cheaper than the traditional inspection model provided by the department and thus did not present an attractive alternative, given the dependence on backfilling from qualified inspectors elsewhere on the chain. It appears that the reason for the limited competitiveness of third party providers is a combination of their ability to price discriminate based on location, as well the need to fully build their overheads into the price of providing inspectors: as discussed above, the department has been allocating a portion of FSMA and OPV overheads to levy payments.

While specifics are commercial-in-confidence, all third party providers said that profit margins are tight and that they had to either diversify (including in other sectors) or offer additional services to processors. Only the larger third party providers are seeking to expand their client base; the other operators indicated that their viability is affected by the small market and labour difficulties. With the limited uptake of the AAO model restricting market size and the subsidisation of the traditional model affecting inspection pricing, third party providers and any potential new entrants will find difficulty in achieving economies of scale and running a competitive and profitable businesses. If current conditions continue, it is likely that third party providers may exit the industry.

Seasonal impacts on industry perception of value

Seasonal variations will affect the perceived value-for-money of cost recovery. This review was conducted during a prolonged period of drought resulting in high throughput for processors. In a return to wetter conditions, processor throughput numbers are expected to drop and value-for-money of inspection services will likely be negatively impacted.

This is a result of inspector and veterinary officer numbers not entirely scaling with throughput volume and thus, inspection costs will be spread over a lower volume, increasing the inspection cost per head. Further, issues discussed above, such as industry's greater desire for flexibility and reduced audit burden, will likely be greater.

8.5 Recommendations

Recommendation 9

That government and industry consider the following recommendations during consultations on the Cost Recovery Implementation Statement: Meat export certification 2019-20 and the independent review of export certification costs:

- a. **That pricing Option 3 of the Cost Recovery Implementation Statement: Meat export certification 2019-20 consultation draft presents the most appropriate model, in which levy prices are rebased and a harmonised fee-for-service structure is in place, with all corporate overhead expenses associated with FSMA and OPVs recovered through fees charged to the user**
- b. **That the department undertakes more regular, transparent benchmarking exercises to ensure its charges are recovering the efficient costs of operations.**

This review supports a pricing model which aligns with the original design intentions of AEMIS: 'user pays', adjustability to reflect changing conditions, tiered charges to reflect cost of effort, and equitable distribution of benefits. Palladium supports a pricing model where fees reflect the efficient costs, that is, where the minimum necessary expenses to complete an activity are borne through fees by the consumer of that activity (rather than broad-based levies) and that all costs associated with the activity are captured in the fees.

Option 3 of the Cost Recovery Implementation Statement: Meat export certification 2019-20 consultation draft is considered to meet these criteria, with FSMA and OPV overheads attributed directly to the user and beneficiary of those services.

Support of this pricing option is as follows:

- // cross-subsidisation correction: this will enhance the equity of the charging system as AAO users are currently subsidising traditional inspection users through their levy payments
- // facilitation of informed market choice: this will correct the deficient price signal and allow processors to perform a true cost comparison between government and non-government provision of inspections
- // alignment with original design principles of AEMIS.

However, support of this pricing option is conditional upon:

- // re-pricing of charges and annual reviews of their associated expense
- // more extensive benchmarking exercises be undertaken annually and made available to industry.

Under cost recovery guidelines, departmental charges are for recovery of *efficient costs*: defined as the minimum costs necessary to provide the activity while achieving the policy objectives and legislative functions of the Australian Government. In order to provide assurance that the recovered costs are indeed the efficient costs, the department should consider undertaking more extensive benchmarking exercises. Methods to provide assurance that costs are efficient include, but are not limited to:

- // assessing the proportion of activities outsourced to the private sector through approaches to market
- // benchmarking both total and component costs against comparable departments, both domestically and internationally
- // regularly market testing the cost of activities in the private sector.

Given that much of industry cited perceptions of departmental inefficiency for rising total costs of AEMIS, and that the Auditor General report⁹⁵ of the department could not conclusively determine whether costs are efficient or inefficient, benchmarking exercises and their outcomes should be made available to industry.

These recommendations are provided as inputs to the consultations on the Cost Recovery Implementation Statement: Meat export certification 2019-20 (public submissions close on 10 December 2019) and the Independent Review of the Cost of Export Certification.

⁹⁵ The Australian National Audit Office Auditor-General Report No.38 2018–19

9.0 PROJECT OUTCOMES – SERVICE DELIVERY

| | |
|-------------------------|---|
| Findings | <ul style="list-style-type: none"> ✓ The culture of engagement between industry and government on-plant and in sectoral governance and consultative processes was a major factor influencing service delivery satisfaction. ✓ While the department’s role as regulator is clear, it does not have a coherent and consistent culture in delivering its regulatory related services. ✓ AEMIS is contributing to the increasing maturity of the food safety culture of exporters and to quality management; however, mixed adoption of risk-based approaches such as six-monthly EMSAP audits suggest this is not consistent across the sector. |
| Trends and risks | <ul style="list-style-type: none"> ✓ Increasing sophistication of the sector, particularly in relation to the culture of food safety, has the potential to modify the level and type of regulation required. ✓ There is a requirement for the regulation of AEMIS to be future-focused, agile and collaborative to meet the future needs of the sector, in step with evolution in global approaches. ✓ Potential changes in Australian agriculture governance may present both opportunity and risk to AEMIS. |
| Recommendation | <ol style="list-style-type: none"> 10. That the department clearly defines and consistently implements the regulatory culture for AEMIS. 11. That industry encourages and supports export meat establishments to continue to mature their food safety culture. 12. That the department ensures its lines of accountability and performance management are clear to industry to facilitate greater transparency and timely resolution of on-plant issues. |

9.1 Design

The criteria originally conceived for assessing this pillar were: whether services are high quality, timely and appropriate; if the assumptions in AEMIS remain valid; if it is well positioned to meet future needs; and if it is well governed. These have been addressed across all pillars. However, both government and industry highlighted culture or ‘ways of working’, as an important element which stands as a cross-cutting influence on the level of satisfaction with AEMIS.

For the department, the critical issue is its regulatory culture. The Department of Prime Minister and Cabinet has stated regulation may be defined as “any rule endorsed by government where there is an expectation of compliance”⁹⁶.

⁹⁶ Department of Prime Minister and Cabinet, 2014, *The Australian Government Guide to Regulation*, p3

Internationally, the OECD has stated that “regulation is broadly defined as imposition of rules by government, backed by the use of penalties that are intended specifically to modify the economic behaviour of individuals and firms in the private sector”⁹⁷.

*Regulators are also important actors in the national governance infrastructure and can help to ensure transparency in the overall regulatory system. Increasingly this includes providing access to information for regulated entities to make better informed choices. The study of behaviours is also another way for regulators to determine appropriate forms of intervention.*⁹⁸

OECD

The department must comply with the Australian Government Regulator Performance Framework⁹⁹, including self-assessing its regulatory performance against six key performance indicators:

1. As regulators we do not unnecessarily impede the efficient operation of regulated entities.
2. Our communication with regulated entities is clear, targeted and effective.
3. Our actions as regulators are proportionate to the regulatory risk being managed.
4. Our compliance and monitoring approaches are streamlined and coordinated.
5. As regulators we are open and transparent in dealing with regulated entities.
6. As regulators we actively contribute to the continuous improvement of regulatory frameworks.

Key to this is the dynamic between the regulator, its authorised agents and the regulated entities, and how this affects the system as a whole.

AEMIS was designed to empower industry to be more accountable for food safety and integrity, within a regulatory framework implemented by government that is based on risk, allowing it to focus its efforts on those establishments requiring greatest oversight.

EMIAC has long been established as the key governance mechanism through which government consults with industry, whose representatives are in turn expected to contribute constructively for the mutual benefit of the sector.

9.2 Implementation

Culture is a recurring theme

The most consistent influence on perceptions of how well AEMIS meets expectations, apart from cost, was culture. This was raised by both government and industry and included culture at several levels:

- // the regulatory stance of the department generally and specifically in relation to AEMIS and how this is reflected in engagement:
 - / between industry and the department in Canberra and regional offices
 - / on-plant between department staff, plant management and AAOs, including performance management.

⁹⁷ OECD, 2002, Glossary of Statistical Terms, Regulation, <https://stats.oecd.org/glossary/detail.asp?ID=3295>

⁹⁸ OECD, 2014, The Governance of Regulators - OECD Principles for the Governance of Regulators, p 15

⁹⁹ Department of Prime Minister and Cabinet, 2014, Australian Government Regulator Performance Framework

- // the interface between AEMIS and establishments' organisational culture, including food safety culture
- // industry-to-industry dynamics, including the balance of individual company decisions and the industry-wide ramifications of those decisions and the ability of industry to provide a coordinated and consistent message to government.

The regulatory stance of the department is unclear

Regulatory culture was an issue that emerged repeatedly, consistent with findings in the Moss Review into the department's regulatory capability and culture as it relates to live animal exports. The Moss Review highlighted the challenges faced by the department in executing its role as a regulator while recovering from industry the cost of operating the regulatory framework, noting that this had led parts of the live export industry to think it is paying for a service. The Moss Review found: "This attitude is a risk to the relationship between the department and the industry. It must be clear in the mind of the party paying for a regulatory function and the regulator itself that the former is covering the cost of regulation, not paying for a service"¹⁰⁰.

This has also been the case in relation to AEMIS. While the department is the regulator for AEMIS, the fact remains that this sits alongside its role as market facilitator and, with the introduction of cost-efficiency arrangements, as a provider of non-regulatory services. Industry unanimously acknowledged the department's regulatory role but, rightly or wrongly, the cost-recovery environment creates expectations that this is complemented with a service delivery mindset.

There is also a lack of clarity about the regulatory stance of the department. While its tasks are clear, the way in which it fulfils those tasks – the culture – is unclear and, as a consequence, inconsistent. In some instances, industry reported on-plant relationships with the department acting akin to a policeman, while in others it was more like a coach focused on an outcome.

"You can deliver compliance in partnership, as long as you demonstrate that independence."

Industry consultee

Others reported that a level of predictability was most important, irrespective of the stance.

"I don't have a problem with DAWR sitting in the policeman type role, as long as they're consistent."

Industry consultee

This lack of clarity and consistency may well stem from the difficulty experienced by the department in straddling the difference between its regulatory role and the service delivery expectations held by some parts of industry, and even within the department itself.

¹⁰⁰ P. Moss, 2018, *Review of the Regulatory Capability and Culture of the Department of Agriculture and Water Resources in the Regulation of Live Animal Exports*, p 53

This highlights two key considerations:

- // the need to clearly understand that AEMIS is a regulatory framework first and foremost, which serves the purpose of ensuring market access through assurance of product integrity and food safety
- // the need to clearly understand that the department's role is as the regulator, and as such, it is not a service delivery mechanism.

The second point aligns with Recommendation 1 in Section 6: Operations, highlighting that it stands to reason that any activities conducted by the department outside its mandatory scope as the regulator should be carefully reviewed.

The overall lack of clarity also causes issues for government, with the department expressing dissatisfaction that industry felt that it had oversight of the department, including perceiving EMIAC as a board, rather than a forum for engagement.

“Industry feels it has the power to tell DAWR what it wants because it is footing the bill.”

Industry consultee

In its response to the Moss Review¹⁰¹, the department highlighted that the role of the newly appointed Principal Regulatory Officer “will support and contribute more widely to an organisational culture that encourages knowledge sharing, continuous learning and adaptation to the changing regulatory environment, and contribute to the development of the department as a competent, credible and capable regulator”.

The department is currently developing a Regulatory Practice Framework to provide guidance across all of its mandate, including AEMIS, which it advises will articulate what is regulated, why, by whom, for whom, and how, within a risk assessment model. Importantly, it will have a focus on how this framework is operationalised, including providing training for staff. The Framework will outline principles for engagement and be complemented by a change management plan. It will be finalised in late 2019, following consultation internally and with industry.

Exporters' food safety culture is maturing

During the consultations, industry was keen to point out that it is highly motivated to comply with regulatory requirements, given the commercial and reputational costs incurred if it fails to do so. It also has limited opportunity to be non-compliant, given the strength of government oversight of AEMIS and the proliferation of stakeholder auditing more generally.

Some plants, particularly those using company-employed AAOs, reported that AEMIS had contributed significantly to improving their culture of food safety. Plants that had trained staff from along the chain found it had heightened awareness of why processes are undertaken and the contribution it makes to meat safety, integrity and ultimately quality.

¹⁰¹ Department of Agriculture, 2019, Response of the Department of Agriculture and Water Resources (the regulator) to the Review of the Regulatory Capability and Culture of the Department of Agriculture and Water Resources in the Regulation of Live Animal Exports, p 16

These are characteristics of ‘food safety champions’ as defined in the draft food safety maturity model developed by Food Safety Australia and New Zealand (FSANZ)¹⁰². However, while there is a strong focus on compliance across industry, this higher level of maturity is not considered to be uniform, as indicated by the lower than forecast uptake of six-monthly EMSAP audits, which are intended to give establishments greater autonomy and responsibility for their assurance systems.

Dynamics between government staff, plant management and AAOs have improved but could be better

At a plant level, this review has highlighted that engagement between OPVs, FSMAs, AAOs and company staff is generally perceived to have improved significantly since the introduction of AEMIS. This built on improvements following the introduction of the Export Control (Meat and Meat Product) Orders 2005, which changed the OPV’s role to ensure compliance with Approved Arrangements, rather than the previous situation where OPVs enforced compliance with Export Meat Orders, irrespective of their practicality at specific plants.

“There’s been a few changes in personnel as their job descriptions changed following the introduction of AEMIS... Things are better now. They help the production flow as well as doing their inspection duties and create a better outcome than the old pre-AEMIS days.”

Traditional model plant

Generally, industry had praise for OPVs and individuals in management roles, including ATMs and FOMs. Nonetheless, some in industry continue to have concerns about performance management and their ability to seek timely redress from the department. Industry noted that while some OPVs have good relationships with FSMAs, when the opposite occurs, their business can get caught in the middle.

Core to this was criticism of the departmental structure. Industry repeatedly expressed disappointment that the Beale Review’s recommendations on the establishment of a single agency had not been implemented. Instead, they and some in government criticised the structure of the department which has teams with regulatory responsibilities and capabilities sitting in different branches, saying it caused confusion as to the decision-making hierarchy. Concerns were also raised that performance management of OPVs is no longer undertaken by veterinarians, with the ATMs and FOMs aligned to another branch. This is another commonality with the findings of the Moss Review which noted that: “There is a sense of disconnection between the policy areas of the department and the regional staff members who engage directly with the industry”¹⁰³.

“They’re difficult to approach, elusive in their answers, have no experience in abattoirs, turn small requests into huge ordeals to take up time, they seem to work against us, rather than with us.”

Industry consultee

¹⁰² Food Standards Australia and New Zealand, 2019, Step 3 Follow Through in Food Safety Culture

¹⁰³ P. Moss, 2018, *Review of the Regulatory Capability and Culture of the Department of Agriculture and Water Resources in the Regulation of Live Animal Exports*, p xi

The department said it was committed to work with industry to address performance, but considers the rhetoric is often overstated relative to the issues raised formally by industry. The department also noted that it had to follow due process for performance management in accordance with government policy and that change at an individual level also requires training, management and coaching.

Equally, the department raises issues with companies where their practices are inappropriate, such as intimidating government staff, and as necessary, takes prescribed action.

This then leads into the crucial consideration that AEMIS relies heavily on the participation and cooperation with industry to function effectively. The department raised concerns that the department does not get a clear message from industry on priorities and issues which need to be addressed, thus making the application of limited resources to address these issues problematic.

9.3 Trends

Industry's growing emphasis on food safety culture will potentially modify the level of regulation required

The food sector is increasingly focusing on food safety culture – “how and what everyone in a company or organisation thinks about food safety and how they act in their daily job to produce safe and suitable food”¹⁰⁴. In the last two years, FSANZ has developed guidance and checklists for industry on what constitutes a good food safety culture, which it says “is usually the result of a good culture across all other aspects of the business: quality, worker health and safety and values such as honesty and integrity”¹⁰⁵.

In July 2019, FSANZ released a draft food safety maturity matrix, which covers five stages from ‘unintended or deliberate non-compliance’ through to ‘food safety champions’ and is based on nine criteria:

1. Knowledge of food safety
2. Workplace culture
3. Management behaviour
4. Staff behaviour
5. Day-to-day operations
6. Communication
7. Use of technology, tools and resources (including data)
8. Approach to problem solving
9. Engagement with regulators.

The Fresh Produce Safety Centre Australia and New Zealand is collaborating with the Australian dairy sectors to help businesses realise the opportunities of robust food safety culture and its relationship to business continuity.

¹⁰⁴ Food Standards Australia and New Zealand, 2017, *2016–17 Annual Report*, Chapter 2 Coordinate National Response and Monitoring

¹⁰⁵ Food Standards Australia and New Zealand, 2019, *Food Safety Culture in Fresh Produce Businesses in Food Safety Culture Connections*

Dairy Food Safety Victoria (DFSV) has an initiative called RegTech 2022¹⁰⁶ which could inform the future direction of regulatory frameworks such as AEMIS, integrating performance data and measures of safety compliance across the dairy supply chain, rather than solely focusing on audits.

This initiative builds on existing capability – using data already collected by industry, using DFSV’s knowledge base gained through auditing and extending DFSV’s business processes to capture data and do analysis (e.g. benchmarking and trending). It also uses the opportunities provided by digital technology to streamline information collection and reporting.

Dairy Food Safe Victoria

This framework is an example of an industry which is seeking to maximise data capture and increase its utility for the purposes of effective and efficient regulation and streamlined regulatory compliance.

DFSV is also developing the Australian Dairy Food Safety Culture Maturity model, applying global business-led approaches¹⁰⁷ to improve food safety culture in individual food establishments to the whole sector. Organisations with a strong food safety culture embed it in their vision and mission and their people and drive consistency, adaptability and hazard and risk awareness.

This, combined with data infrastructure and analysis, can ensure regulators can focus on risk management in real time.

There is a requirement for AEMIS to be future-focused, agile and collaborative to meet the future needs of the sector and expectations of importing countries

If the government’s approach to the provision of its regulation related services is to be governed by the key performance indicators set out in the performance framework, then there will be an inherent commitment to consistency, transparency and a contribution to the continual improvement of the regulatory framework. It will also be vital that industry applies the same principles in its approach to the ongoing operations of AEMIS to ensure the system evolves to meet the needs of an ever-changing market dynamic.

International regulatory cooperation contributes to efficiency in the global trading system

In its report, *Facilitating Trade Through Regulatory Cooperation*, the WTO and its TBT and SPS Committees have highlighted the need for countries to increase their cooperative efforts in regulatory standard setting and application. The report noted that cooperation enhances “mutual understanding...and can promote regulatory convergence, harmonisation, mutual recognition and equivalence, thereby contributing to the avoidance of unnecessary regulatory differences and to the reduction of unnecessary barriers to trade”¹⁰⁸.

AEMIS will benefit from the department’s active engagement on these WTO committees to influence and inform global regulatory practice and its application to bilateral trade relationships, including importing country requirements.

¹⁰⁶ <https://www.dairysafe.vic.gov.au/dairy-regtech-2022>

¹⁰⁷ <https://mygfsi.com/>

¹⁰⁸ OECD, WTO, 2019, *Facilitating Trade Through Regulatory Cooperation: The Case of the WTO's TBT/SPS Agreements and Committees*

9.4 Risks

Potential changes in Australian agricultural governance structures

The recent review of the red meat Memorandum of Understanding has potential implications for the governance structure of the sector via recommendations that may lead to an amalgamation of industry research and development corporations (RDCs), as well as integrity, food safety and quality assurance programs through the creation of what the White Paper calls “NewCo 2 & 3”. Such an amalgamation may be beneficial for AEMIS through potential greater alignment with respect to priorities in areas, such as market access and protocol/NTM issues. This may help the department better target its limited resources to areas of most need. Accordingly, such amalgamations may also present a risk to AEMIS should there be a decreased focus on critical priorities as a result of being lost among other issues that may be perceived to be of greater importance to a much larger and more cumbersome organisational structure.

The Minister for Agriculture has also recently released a discussion paper on *Modernising the research and development corporation system*¹⁰⁹. It highlights the need to ensure the agricultural innovation system is “future ready”. This discussion paper poses many questions relating to the RDC sector, in particular “How can RDCs increase collaboration to ensure better investment in, and returns from, cross-sectoral, transformative and public good research?” This process may present opportunity to increase collaboration to yield more targeted and valuable outcomes that may benefit how meat inspection and certification are performed and delivered in Australia.

9.5 Recommendations

Recommendation 10

That the department clearly defines and consistently implements the regulatory culture for AEMIS, with clear lines of accountability and performance management.

It is anticipated that clarity around the department’s role as a regulator and the way in which it provides its regulatory related services will improve as it rolls out its new Regulatory Practice Framework, and the activities of the Principal Regulatory Officer take effect.

Implementation considerations

The most significant challenge will be to ensure consistency of culture in implementation across headquarters and on-plant. The department has indicated it will support implementation of the Regulatory Practice Framework through staff training. It is noted that the requirements of on-plant roles make training options challenging, but this should be prioritised and integrated into other training and staff management arrangements in a timely way.

¹⁰⁹ <https://haveyoursay.agriculture.gov.au/modernising-rdc>

Recommendation 11

That industry encourages and supports export meat establishments to continue to mature their food safety culture.

The export meat sector and its industry bodies should participate in the evolution of the FSANZ food safety culture guidance, and monitor the design and implementation of DFSV's food safety culture maturity model for lessons to apply in the export meat sector.

Implementation considerations

Establishments can immediately draw on the available draft models to influence their own organisational and food safety culture, which is intended to contribute to good business. A higher level of maturity across the sector will support government to take a stronger risk-based approach to regulation. This will be supported by implementation of a number of recommendations of this report, particularly relating to sector-wide implementation of six-monthly EMSAP audits as standard.

Recommendation 12

That the department ensures its lines of accountability and performance management are clear to industry to facilitate greater transparency and timely resolution of on-plant issues.

While the department considers that its approach to accountability and performance management is clear, based on feedback during consultations, this continues to influence on on-plant culture and engagement with the department.

Implementation considerations

The department's organisational structure can create tensions between policy, corporate oversight and implementation. Continuous clarity around lines of accountability and response to and progress of performance management issues will enable better interaction and issues resolution between industry and the department where required. Equally, industry needs to accept that the department must follow due process in accordance with the requirements of the APS standards on timelines that may differ to industry expectations. This in turn, will lead to an overall improvement in the culture of the system and those working within it.

10.0 ABBREVIATIONS AND DEFINITIONS

10.1 Table of abbreviations

| | |
|-------|---|
| AAO | Australian Government Authorised Officer |
| AEMIS | Australian Export Meat Inspection System |
| AMIC | Australian Meat Industry Council |
| AMPC | Australian Meat Processor Corporation |
| ANAO | Australian National Audit Office |
| AQIS | Australian Quarantine Inspection Service (now the Department of Agriculture) |
| ATM | Area Technical Manager |
| CRIS | Cost Recovery Implementation Statement |
| DAWR | Department of Agriculture and Water Resources (now the Department of Agriculture) |
| DFAT | Department of Foreign Affairs and Trade |
| ECRP | Export Certification Reform Package |
| EMIAC | Export Meat Industry Advisory Committee |
| EMSAP | Export Meat Systems Audit Program |
| EU | European Union |
| FOM | Field Operations Manager |
| FSMA | Food Safety Meat Assessor |
| FTA | Free Trade Agreement |
| FTE | Full-time equivalent |
| HACCP | Hazard Analysis Critical Control Point |
| MEVS | Meat Establishment Verification System |
| MEDC | Meat Export Data Collection |
| MLA | Meat and Livestock Australia |
| OIE | World Organisation for Animal Health |
| OPV | On-Plant Veterinary Officer |
| PAMI | Porcine Ante Mortem Inspector |
| PHI | Product Hygiene Index |
| PHIP | Product Hygiene Indicator Program |
| PMI | Post-Mortem Inspection |
| RTO | Registered Training Organisation |
| SRA | State Regulatory Authority |
| US | United States of America |
| VEMG | Veterinary and Export Meat Group, formerly Veterinary and Export Meat Services |

10.2 Table of definitions

| Term | Definition |
|--|---|
| Ante-mortem Inspection | Inspection conducted by a competent person on live animals for the purpose of judgement on disposition and suitability for slaughter for human consumption. Ante-mortem inspection is implemented to ensure that only healthy animals are presented for slaughter, which ultimately lessens the risk of unwholesome meat entering the food chain. |
| Approved Arrangement (AA) | An arrangement approved under export legislation required by all registered export meat establishments. |
| Area Technical Manager (ATM) | A departmental officer with responsibility for the supervision, performance, assessment and verification of technical standards and operations in a defined group of export meat establishments. ATMs are appointed as authorised officers under the Export Control Act. |
| Australian Government Authorised Officer (AAO) | A qualified meat inspector who is authorised, through a deed of obligation under export legislation, to undertake post-mortem inspection under the supervision of the OPV. |
| Australian Meat Standard | The Australian Standard for Hygienic Production and Transportation of Meat and Meat Products for Human Consumption, AS 4696:2007 |
| Cost effective | The minimum costs necessary to provide the activity for achieving the targeted outcome, with costs borne by the most appropriate stakeholder |
| Efficient | Operating effectively in an organised and timely way, with tasks performed by the most appropriate stakeholder |
| Field Operations Manager (FOM) | A senior veterinary authorised officer who has responsibility for technical supervision of ATMs within and across defined geographic areas. The FOM approves applications from establishments to enter the systems audit program, approves corrective action plans, and is the lead auditor on critical incident response audits. |
| Fit-for-purpose | Well-equipped or well suited for its designated role or purpose |
| Food Safety Auditor (FSA) | A departmental authorised officer who undertakes audit of some classes of export registered establishments, including poultry, processed meats and independent cold storage establishments. |
| Food Safety Auditor (circuit) | A departmental authorised officer who has meat inspection qualifications and undertakes verification and audit of export registered independent boning rooms |

| | |
|---|---|
| Food Safety Meat Assessor (FSMA) | A departmental authorised officer who has meat inspection qualifications and conducts inspection and/or assessment and/or verification activities on export registered meat establishments. The tasks undertaken are dependent upon the particular AEMIS model operating on that establishment. |
| Limited Market Access (LMA) | An AEMIS model for export meat establishment registration that allows for limited market access and has Australian Government oversight. |
| Meat Establishment Verification System (MEVS) | The department's on-plant verification system which underpins the department's health certification system and supports AEMIS. |
| On-Plant Veterinarian (OPV) | An authorised officer (veterinarian) employed by the Australian Government to conduct ante-mortem inspection and to provide daily supervision of post-mortem inspection and verification of the establishment's approved arrangement. In limited specific circumstances, and in accordance with importing country requirements, the OPV may supervise ante-mortem inspection conducted by another authorised officer(s). The OPV may personally conduct post-mortem inspection. |
| Price signal | Information conveyed to stakeholders via the price charged for a product or service which provides a signal for parties to increase or decrease the quantity supplied or demanded ¹¹⁰ . |
| Porcine Ante-Mortem Inspectors (PAMI) | Authorised officers trained in conducting ante-mortem inspection of pigs. Must have attained specified units of competency as part of completing the Certificate III in Meat Processing (General/Livestock handling/Meat Safety) qualification. |
| Post-mortem Inspection | Post-mortem inspection is performed to remove any potential source of contamination to human food, those carcasses or carcase parts that are dangerous, unwholesome or aesthetically unacceptable to the consumer. It is the second stage after ante-mortem inspection to reduce the risk of meat not being suitable for human consumption. |
| Product Hygiene Indicators (PHI) | The PHI program identifies a number of key performance indicators, which, when combined produce an index, is a measure of hygienic meat production at individual export meat establishments. |
| Value-for-money | The most advantageous combination of cost, quality and sustainability to meet customer requirements |

¹¹⁰ Boudreaux, D, *Information and Prices*, The Concise Encyclopedia of Economics, <https://www.econlib.org/library/Enc/InformationandPrices.html>

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12.0 APPENDICES

12.1 Appendix 1 – Consultation methodology and process

Consultations with processors and non-processor exporters

On 1 April 2019, AMPC and AMIC communicated an invitation for Expressions of Interest (EOIs) to their members for processor and non-processor organisations to be involved in the consultation process, particularly through site visits including interviews with management. Telephone interviews for interested stakeholders were also encouraged for those who were not able to be consulted face-to-face or on-site.

A further reminder was sent on 2 May 2019 to attract more interest and greater diversity of respondents. Palladium received 14 EOIs from industry, 12 through the formal communication channels established by AMIC and AMPC, and two received directly.

Palladium conducted an analysis of the EOIs received to ensure that a representative sample of industry would be consulted, including consideration of location, inspection model used, meat type, throughput, and export destination. Initial results indicated that sheep meat processors may be under-represented – AMPC assisted to correct this through direct outreach to sheep meat processors. Where appropriate, Palladium visited multiple site locations of the larger multi-site processors.

Consultations with government and other industry stakeholders

In addition to the EOIs and direct outreach undertaken by AMPC, Palladium directly contacted key stakeholders, including:

- // Government, including the Department of Agriculture and its subdivisions, and the Department of Foreign Affairs and Trade (DFAT)
- // Peak industry bodies
- // Third party providers
- // Registered training organisations (RTOs)
- // Unions.

Government

The consultations included relevant functions within the Department of Agriculture, including:

- // Australian Chief Veterinary Office
- // Biosecurity Operations Division: Veterinary and Export Meat Services (later referred to as Veterinary and Export Meat Group)
- // Compliance: Compliance Policy
- // Exports Division: Export Standards
- // Exports Division: Meat Exports
- // Industry Support: Finance and Business Support Division, Cost Recovery Design
- // Trade & Market Access Division.

In addition, the department had indicated that it may lodge a formal written submission during the process. Although it had not done so by the close of the formal consultation period, Palladium would still welcome a formal written submission.

DFAT's Office of Trade Negotiations and Free Trade Agreement Division were also consulted on the market access and trade components of the review.

Peak Industry Bodies

Palladium extended invitations to 12 peak industry bodies, a number of whom initially expressed their interest in contributing to the review; however only five peak bodies chose to participate. These included AMIC, Australian Pork Limited (APL), Australian Renderers Association, MINTRAC, Meat and Livestock Australia (MLA) and Red Meat Advisory Council.

Third Party Providers

Invitations were extended to all third party providers, with four of the six registered providers choosing to participate. Both Meat Inspectors Australia and Eville and Jones participated in the consultations; together, they represent the majority of the third party provider sector. These consultations provided insight into implementation of the AAO model, as well as the decisions of processors to use third party providers, including geographic, financial, and idiosyncratic issues of the processor.

Registered Training Organisations

Invitations were offered to nine registered RTOs who provide training in Certificate III and Certificate IV in Meat Processing (Meat Safety). Only one RTO chose to participate in the consultations. However, Palladium considers the consultation with MINTRAC sufficient to provide an understanding of the RTO sector and training approaches for meat inspection.

Unions

One consultation was held with a representative for the meat inspectors from the Community and Public Sector Union.

Industry Events

Palladium initially planned to promote the review at industry events. However, prior to the commencement of the consultation phase, the review team assessed upcoming industry events for both timeliness and ability to raise awareness and increase the number of submissions. Unfortunately, the timing of industry events did not align with the review and this channel was utilised once only. Palladium attended an APL-hosted workshop and held a group consultation session with five of the seven pork exporters.

Submissions

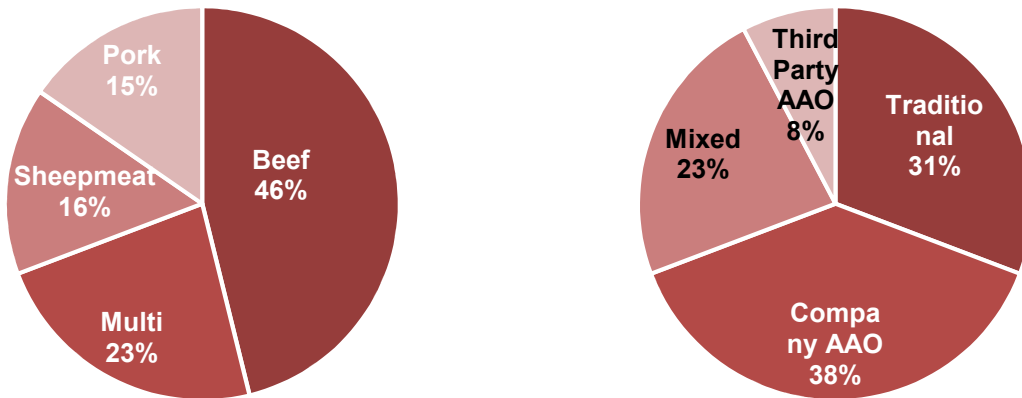
A general invitation for submissions by organisations or individuals that address the review's terms of reference was launched on 1 April and concluded on 23 June 2019. The Palladium-hosted website, www.aemisreview.com.au, was promoted through existing AMPC and AMIC communication channels, as well as by Palladium when contacting prospective consultation participants. Only one submission was received, from AUS-MEAT.

Consultations Conducted

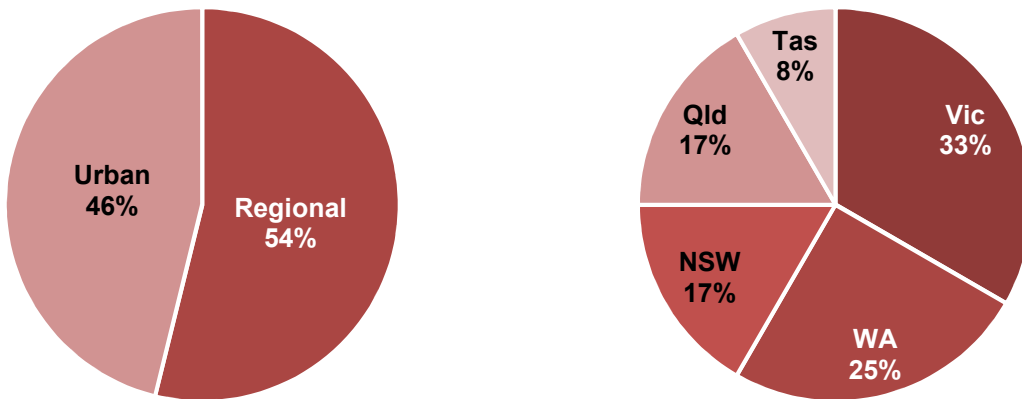
The consultations were diversified in terms of both operations and geography. Inspection model choice was well balanced between traditional and company AAO models, with additional insight gained from consultations with third party providers.

Beef processors comprised nearly half of the processor consultations, but it should be noted that the multi-species plants had a significant share of their throughput in sheep meat. Palladium has sought to fairly reflect feedback from processors of different species.

Processors by Operations



Processors by Location



Urban reflects Significant Urban Areas as defined by the Australian Bureau of Statistics 2016 Census, including significant towns or cities greater than 10,000 people.

In total, 38 consultations were conducted. This was in line with Palladium’s original estimate of 30 to 35 consultations.