



Australian Government

Inspector-General of  
Live Animal Exports

# Livestock export permit systems and processes

---

REVIEW REPORT NO. 2021/02



© Commonwealth of Australia 2021

#### Ownership of intellectual property rights

Unless otherwise noted, copyright (and any other intellectual property rights) in this publication is owned by the Commonwealth of Australia (referred to as the Commonwealth).

#### Creative Commons licence

All material in this publication is licensed under a [Creative Commons Attribution 4.0 International Licence](#) except for content supplied by third parties, logos and the Commonwealth Coat of Arms.

Inquiries about the licence and any use of this document should be emailed to [copyright@awe.gov.au](mailto:copyright@awe.gov.au)



#### Cataloguing data

This publication (and any material sourced from it) should be attributed as: Inspector-General of Live Animal Exports 2021, *Livestock export permit systems and processes*, Department of Agriculture, Water and the Environment, Canberra. CC BY 4.0.

ISBN 978-1-76003-461-0

This publication is available at [iglae.gov.au](http://iglae.gov.au).

Inspector-General of Live Animal Exports  
c/- Department of Agriculture, Water and the Environment  
GPO Box 858 Canberra ACT 2601  
Telephone 1800 900 090  
Email [iglae@awe.gov.au](mailto:iglae@awe.gov.au)  
Web [iglae.gov.au](http://iglae.gov.au)

#### Disclaimer

The Australian Government acting through the Inspector-General of Live Animal Exports has exercised due care and skill in preparing and compiling the information and data in this publication. Notwithstanding, the Inspector-General of Live Animal Exports, its employees and advisers disclaim all liability, including liability for negligence and for any loss, damage, injury, expense or cost incurred by any person as a result of accessing, using or relying on any of the information or data in this publication to the maximum extent permitted by law.

#### Credits

The source of data for all figures and tables is the Department of Agriculture, Water and the Environment unless otherwise noted.

#### Review team and acknowledgements

Mr Glenn McMellon, Dr Hyo Ryung Lee and Ms Heidi Barbour assisted the inspector-general in this review.

The inspector-general gratefully acknowledges the cooperation and advice of the Australian Government Department of Agriculture, Water and the Environment and those that provided input into this review.

# Contents

<b>Review process</b>	<b>1</b>
Objectives	1
Scope	1
Out of scope	2
Methodology	3
<b>Summary</b>	<b>4</b>
<b>Recommendations and department responses</b>	<b>6</b>
<b>1 Background</b>	<b>10</b>
<b>2 Industry overview</b>	<b>12</b>
2.1 Feeder and slaughter livestock	12
2.2 Breeder livestock exports	15
<b>3 Application and assessment</b>	<b>16</b>
3.1 Pre-export application requirements	16
3.2 Notice of intention to export livestock	18
3.3 Application for export permit and health certificate	19
3.4 Tracking animal certification for export system	20
3.5 Observations and findings	21
<b>4 Export permit and health certificate approval</b>	<b>24</b>
4.1 Australian Standards for the Export of Livestock	24
4.2 Registered establishments and approved premises	25
4.3 Inspection regime	26
4.4 Livestock export consignment reports	27
4.5 Audits	29
4.6 Observations and findings	30
<b>5 Fremantle model</b>	<b>35</b>
5.1 Background	35
5.2 Reviews	35
5.3 New policy	38
5.4 Observations and findings	41

## **Appendixes**

A	Department's response	44
B	Livestock management plans for air and sea	48
C	Rejection criteria for all species by sea	50
D	Management of animal rejects in ASEL	52

<b>Glossary</b>	<b>54</b>
-----------------	-----------

<b>References</b>	<b>56</b>
-------------------	-----------

## **Figures**

1	Number of feeder and slaughter cattle and sheep exported from 2016 to 2020	13
2	Live cattle export markets 2019	13
3	Live sheep export markets 2019	14
4	Process for notice of intention to export and application for export permit and health certificate	21
5	Overview of livestock inspection and clearance process for export	24
6	Fremantle sheep inspection process	41
7	Sheep inspection at Fremantle Port prior to loading onto a ship	43

## **Tables**

1	Breeder exports, 2016 to 2020	15
2	Impact level of a livestock export consignment report	28

# Review process

## Objectives

This review examined the processes and systems that support decision-making for livestock export permits and health certificates. The review focused on:

- the legislative requirements, objectives, principles and criteria that guide decisions for livestock export notice of intention, export permits and health certificates
- the Department of Agriculture, Water and the Environment's approach to accessibility, transparency and consultation in the livestock export permit decision-making process
- the effectiveness of regulatory oversight by the department during this process
- the efficiency (cost and timeliness) of the department's regulatory oversight of the export process
- the systems, guidance and information that support applicants and the industry in understanding livestock export permits
- the consistency and fairness of the compliance performance management framework applied to livestock exporters
- the appropriateness of the audit, inspection and verification controls in place to ensure animal health and welfare standards are upheld
- inspection and document assurance outcomes and exporters' performance ratings
- whether any improvements should be made to the current arrangements.

## Scope

The review considered:

- the notice of intention to export application process
- compliance management including auditing, investigation, suspension, sanction and revoking processes
- time frames and efficiency of approving notice of intention applications
- time frames and efficiency of issuing livestock export permits
- time frames and efficiency for livestock export permit applicants
- listening and responding to exporters' concerns (encouraging high levels of voluntary compliance)

- issuing of health certificates and export permits by regional departmental veterinary officers
- the Tracking Animal Certification for Export system
- importing country requirements and core documents
- review of the Fremantle model
  - preparation and loading of sheep onto vessels departing from Western Australia
  - Australian Standards for the Export of Livestock (ASEL) requirements pertaining to registered establishments and loading of livestock onto vessels
  - ASEL version 3 requirements
  - case study of the July 2020 voyage to Kuwait (LNC 11558)
- the roles and responsibilities of persons directly responsible for undertaking the livestock exporter's approved export program, including
  - land-based Australian Government accredited veterinarians (AAVs)
  - livestock exporters
- the extent to which current requirements support the mitigation and management of risks to animal health and welfare
- the department's processes for engagement and consultation with industry.

## Out of scope

This review did not examine:

- Australian Certificate for the Carriage of Livestock issued by the Australian Maritime Safety Authority
- Marine Order 43 (Cargo and cargo handling – livestock) 2018
- Exporter Supply Chain Assurance System requirements (the subject of a separate inspector-general review)
- approved arrangements (the subject of a separate inspector-general review)
- shipboard AAVs
- exporter's approved export plan
- competent authority of the importing country
- import permit issued by the importing country.

## Methodology

During this review, the inspector-general:

- conducted an entry meeting with the department's executives to
  - communicate the review's objectives and scope
  - outline responsibilities
  - identify risks related to the review and any appropriate mitigation strategies
  - provide an opportunity for all parties to discuss the proposed review process
- discussed preliminary information requirements with relevant departmental officers and requested information
- conducted a desktop audit of relevant departmental data and documentation (such as instructional material, policies and communications material)
- conducted in-person and phone meetings and interviews with key stakeholders
- invited submissions from stakeholders
- undertook fieldwork to discuss, observe and verify departmental procedures and operations (noting that this was limited by COVID-19 travel restrictions)
- conducted an exit meeting with departmental executives that
  - provided an overview of initial review findings
  - outlined the process of release of and response to the issues paper and draft report
- developed a draft review report with key findings and recommendations
- requested a fact check by the department's relevant line areas to correct any factual errors or misinterpretations of evidence and to provide further evidence
- requested that the Secretary provide a management response to the draft review report
- provided a final report to the Minister for Agriculture and Northern Australia and published it on the [Inspector-General of Live Animal Exports website](#).

## Summary

The Department of Agriculture, Water and the Environment's (the department) decision to issue a livestock export permit and health certificate to an exporter for a consignment of livestock is where the rubber hits the road for the live animal exports regulatory system. The assessments and inspection process undertaken by authorised officers and regional veterinary officers are aimed at assuring the department that legislative and importing country requirements are met, and the health and welfare of livestock about to board a vessel or aircraft are in accordance with the Australian Standards for the Export of Livestock (ASEL). All the upstream processes, decisions and documentation are put to the test by examining actual operational execution.

The inspector-general acknowledges the importance of sound process and fit-for-purpose documentation but, as a general observation, considers that the balance between process and documentation, and testing operational execution, is not optimal. There are opportunities to streamline these processes, refine documentation, and focus increased attention on operational performance.

The department has made important progress in several areas and has a range of further relevant projects in-train, and this is acknowledged in this review. However, the inspector-general reiterates, in Recommendation 5, the need for the department to increase its focus on compliance monitoring during an exporter's operational execution of livestock consignments through risk-targeted, integrated inspections and audits at this critical time.

The inspector-general is also concerned that the current approach to non-compliance through the livestock export consignment report process and consequent performance rating and audit regime is outdated and needs to be reviewed and updated significantly. The *Export Control Act 2020* provides a modern suite of regulatory tools and sanctions that include many options not previously available. A review and update in this context should allow a move to a genuine proportionate response model.



As noted in earlier reviews the inspector-general is concerned that the department relies on dated IT systems to underpin its processes. The inspector-general considers that the current IT system is not fit-for-purpose and hampers the department in its progress to deliver effective and efficient regulation. There are significant opportunities to support improved efficiency, and facilitate high levels of voluntary compliance for industry participants in their interactions with the department. It is disappointing to note that the department has taken an incremental improvement approach to these systems rather than the step change investment required to underpin the transformation to a modern, effective and efficient regulator. The inspector-general reiterates the observations made in previous reviews in this regard, with Recommendation 1.

The Secretary of the department wrote to the inspector-general requesting an examination of the 'Fremantle Model' for identifying and managing reject sheep. The livestock export industry has made important improvements throughout the supply chain to mitigate risks to the health and welfare of livestock. This commences with producers ensuring the breeding lines and husbandry on farm align with export requirements, attention to sourcing specifications by agents, and managing health and welfare through the transportation, quarantine and loading stages of a consignment. The export industry is commended on these improvements.

ASEL and legislative requirements also reflect a continuous assessment approach to ensuring the livestock that are loaded onto a vessel are fit to travel. ASEL and previous reviews have identified that the inspection, identification and rejection of livestock that are not fit should result in their removal from the consignment at the earliest opportunity, and primarily before transportation to the port for final loading. Industry and the department have worked constructively together to arrive at a pragmatic approach to balance compliance and the physical limitations of existing infrastructure to achieve good animal health and welfare in the 'Fremantle model'.

However, the current infrastructure at registered establishments using the Fremantle model does not facilitate the individual identification and removal of reject livestock, to the extent required by ASEL. It also does not achieve the full outcome envisaged by ASEL in minimising the risk of livestock that should have been rejected progressing through the supply chain and ultimately being loaded onto vessels. Accordingly, the inspector-general considers that the 'Fremantle model' should continue to operate but in the context of an agreed and binding progressive schedule of infrastructure improvements to registered establishments (Recommendation 7).

The department's full response to the recommendations is at Appendix A.

# Recommendations and department responses

## Recommendation 1

The department should replace the TRACE system with a modern IT system that supports:

- streamlined application processes with automated verification of pre-existing approvals
- single point of truth for an applicant's documentation, decision and compliance history (for both applicants and departmental officers).

### Department's response: *Agree in principle*

In the short-term, the department is implementing enhancements to the TRACE system that will streamline the application and assessment processes required for exporting livestock. These enhancements will improve the TRACE system's ability to:

- automatically advise exporters about required information (core documents).
- automatically verify information such as pre-existing approvals that the department holds in different databases.
- provide exporters with automated real-time consignment status tracking and tools for exporters to advise the department on the status of required information.

The department's trade reform digital strategy has a range of initiatives that will modernise the department's IT systems for the benefit of exporters and departmental staff. Further user research and analysis will help the department focus on high value areas for improvement, including the provision of modern integrated platforms for efficient streamlined engagement with department services.

The department is already making improvements to export IT systems through the Taking Farmers to Market program which will include live animal exports.

## Recommendation 2

The department should streamline the notice of intention to export (NOI) assessment and decision-making process by:

- implementing a risk-based NOI assessment process to redirect its resources to higher risk consignments and provide faster decisions for lower risk consignments
- publishing updated policy guidelines that define thresholds that trigger the need for a variation to the NOI application to be submitted.

### Department's response

#### ***Point 1: Agree***

The department has implemented a risk-based and streamlined process for assessing notices of intention (NOI) to export. Early data indicates decreases in assessment times and costs for exporters.

#### ***Point 2: Agree in principle***

The department is consulting with stakeholders on a revised policy for variations to NOIs which could be considered minor in nature. The department will consider if there are opportunities to introduce threshold triggers that would not require a variation to the NOI as part of this process and any changes to legislation that may be needed to support this approach.

## Recommendation 3

The department should consider a single integrated application process to include notice of intention to export, export permits and health certificates.

### Department's response: ***Agree in principle***

The department will consider the recommendation as part of its live animal export roundtable projects and its agricultural trade reform program.

One of the roundtable projects is finding ways to streamline the administration of approved arrangements while maintaining effective regulation of the livestock trade. This project will explore the business process, resourcing and legislative opportunities for integrating the NOI, and export permit and health certificate application process.

The department's agriculture trade reform program will introduce modern and connected digital services to create a more streamlined and integrated export experience. Improvements are already being made to our IT systems with benefits being extended to live animal exports consistent with the trade reform program's vision. We will consider the inspector-general's recommendation as part of this program.

**Recommendation 4**

The department should review the Performance management and compliance guidelines – approved arrangements for livestock exporters, including the livestock export consignment reports ratings, the way in which audits are utilised, and how this relates to performance levels, and the utility of performance levels.

**Department's response: *Agree***

The department has already commenced a review of the livestock exporter performance management and compliance framework. Extensive stakeholder consultation with exporters and other industry participants has been completed to identify key themes related to compliance. Work is underway on a revised framework, which will consider how exporter performance and compliance information is recorded and managed over time, and how the department might implement a targeted and proportionate response model. This will include consideration of the utility of a rating system and how audits are best utilised within the broader live animal export assurance activities.

**Recommendation 5**

The department should implement a risk-targeted multidisciplinary audit process that is conducted during the notice of intention to export application and export permit inspection process (consistent with the inspector-general's recommendation 4(d) of the review Monitoring and reporting during livestock export voyages, and Moss Review recommendation 7).

**Department's response: *Agree***

The implementation of this recommendation is in progress including development of a full consignment audit program. In addition, the department is currently looking at an improved integrated assurance framework for live animal exports and will consider the introduction of assurance activities consistent with this recommendation, such as random full document inspections during the notice of intention to export application and export permit process.

**Recommendation 6**

The department should trial the use of body cameras for regional veterinary officers and auditors for use during inspections and onsite audits.

**Department's response: *Agree in principle***

The department agrees there are benefits in using video and photographs as part the inspection record and already encourages the use of cameras during inspections.

To expand the use of cameras to include the use of body cameras requires further investigation of the associated requirements and obligations. The department will investigate, the requirements and obligations required to conduct a trial of body cameras for regional veterinary officers and auditors for use during inspections and onsite audits.

**Recommendation 7**

The department should continue to use its discretion in relation to the Fremantle model provided:

- that where a registered establishment is physically unable to fully comply with ASEL the occupier agrees to develop and submit a program of works that would enable the registered establishment to fully comply, and a schedule and time frame for implementation of those works
- if the works and the time frame are accepted by the department as being reasonably practicable, the department consider an enforceable undertaking to ensure that the works progress over the agreed time frame so that the exporters and registered establishments can be progressively brought into full compliance.

**Department's response: Agree**

The department agrees that all exporters and registered establishments should be able to fully comply with ASEL requirements.

The department agrees to engage with livestock exporters and registered establishment operators to determine a reasonable time frame and program of works to enable registered establishments to fully comply with ASEL requirements.



**Ross Carter**  
Inspector-General of Live Animal Exports  
19 November 2021

## Chapter 1

# Background

Australia has been involved in the export of live animals since 1845, when a small shipment of sheep was exported to Mauritius and Singapore. The Navigation (Deck Cargo and Livestock) Regulations 1926 were introduced to regulate the export of livestock. They prescribed standards including pen and stall size and the provision of adequate food and ventilation. Mandatory veterinary checks were established with the introduction of the Quarantine (Animals) Regulations 1935. These required Australian Government approved veterinarians to inspect livestock for disease. It was not until the Customs (Prohibited Exports) Regulations 1958 were introduced that live cattle and sheep exporters were required to have a permit.

There have been a number of animal welfare incidents that have resulted in reviews of the livestock export industry. These reviews have led to changes in regulation and procedure for exporting livestock. They include:

- Independent Reference Group report on the livestock export industry 2000 – a review of the state of the livestock export trade and its performance.
- Independent Reference Group report on the livestock export industry 2002 – a review of the entire supply chain.
- Keniry Livestock Export Review 2003 – a review in response to concerns about animal welfare with a focus on voyages to the Middle East.
- Farmer Review 2011 – a review to establish new safeguards to provide a verifiable and transparent supply chain assurance system for livestock exported for slaughter.
- McCarthy Review 2018 – a review of conditions for export of sheep to the Middle East during the northern hemisphere summer.
- Moss Review 2018 – a review of the regulatory capability and culture of the Department of Agriculture and Water Resources in the regulation of livestock exports.

The Australian Government Department of Agriculture, Water and the Environment (the department) regulates livestock export through a regulatory framework that comprises the:

- *Export Control Act 2020*
- Export Control (Animals) Rules 2021.

Exporters must also meet the Australian Standards for the Export of Livestock (ASEL). The standards outline the minimum animal health and welfare conditions exporters must meet when exporting livestock from Australia by air and sea.

This legislative framework seeks to assure that animal health and welfare standards are maintained, and that Australian exported livestock meet importing country requirements.

## Chapter 2

# Industry overview

Australia exports livestock by air and sea for feeder, slaughter and breeding purposes. Livestock includes species such as cattle, buffalo, deer, goats, sheep and camelids. Most livestock exported from Australia are cattle (46%) and sheep (45%) by sea (ABARES 2019).

### 2.1 Feeder and slaughter livestock

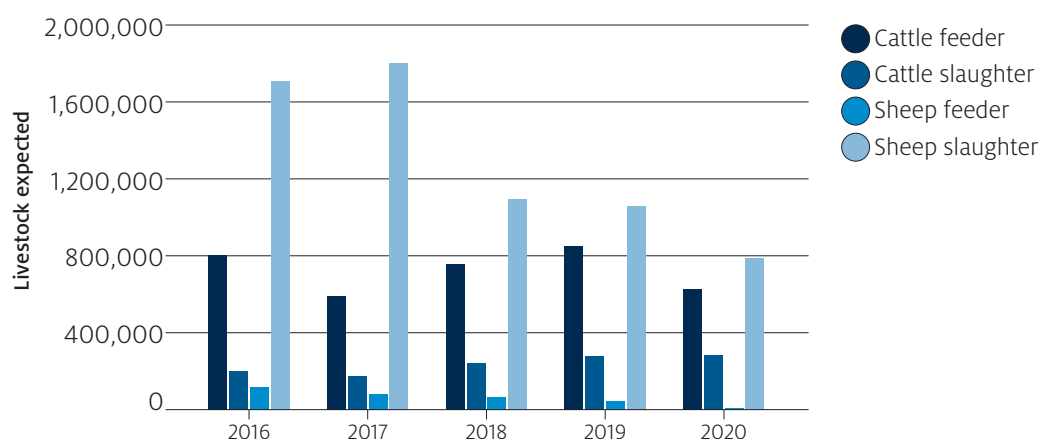
Most exported livestock are recorded by the department as either feeder or slaughter animals. Upon arrival in an importing country, the majority of livestock are delivered to a feedlot where they are fed until they reach market specifications and are then delivered to an abattoir for slaughter. Additional restrictions may be applied by an importing country regarding the commercial attributes of the livestock. For example, feeder cattle must weigh less than 450 kg in some markets as specified in the import permit issued by the importing country. Compliance with these additional commercial requirements are generally met by the exporter unless the Australian Government is required to certify or verify as part of a protocol agreed with an importing country.

Since 2017 there has been an increase in the number of exported feeder and slaughter cattle (Figure 1). In 2020 exports of feeder cattle decreased by 26%. The volume of cattle exported for slaughter remained the same. Feeder cattle usually account for more than three-quarters of all exported cattle.

From 2016 to 2020 the number of live sheep exported for slaughter more than halved. The largest fall was in 2018 when live sheep volumes decreased by over 36% (ABARES 2019) (Figure 1).

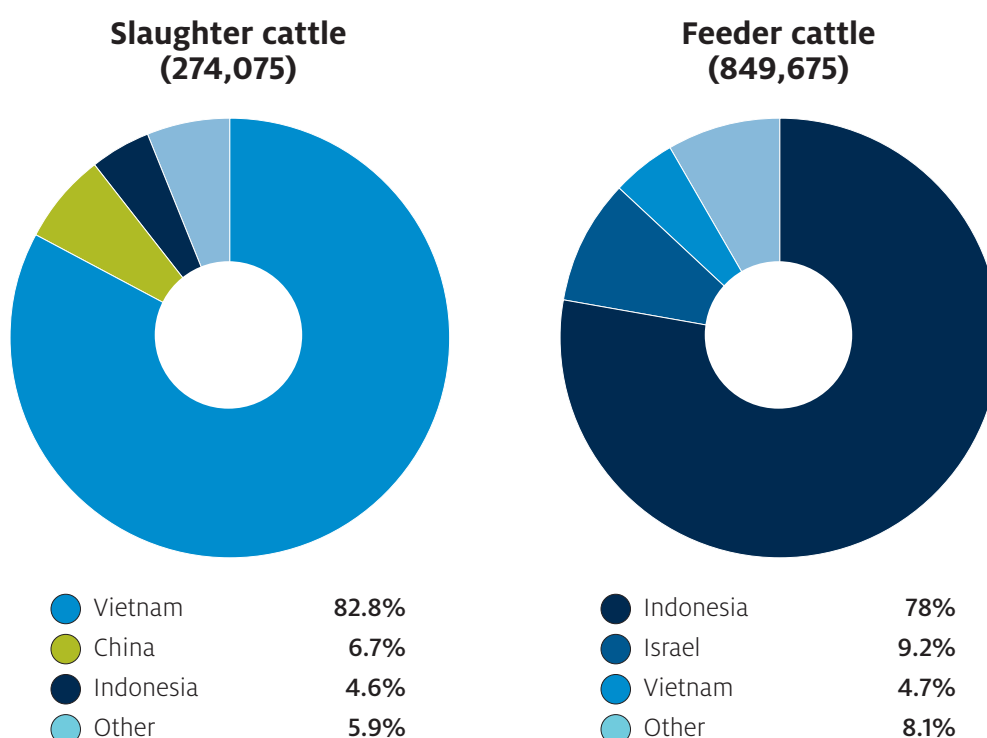


**FIGURE 1** Number of feeder and slaughter cattle and sheep exported from 2016 to 2020



In 2019 Indonesia (78%), Israel (9.2%) and Vietnam (4.7%) were the largest export markets for feeder cattle. Nine other countries accounted for the remaining 8.1%. Vietnam (82.8%) China (6.7%) and Indonesia (4.6%) were the largest exporting markets for slaughter cattle. Seven other countries accounted for the remaining 5.9% (Figure 2). In 2019 live cattle exports represented 17% of total beef exports (ABARES 2019).

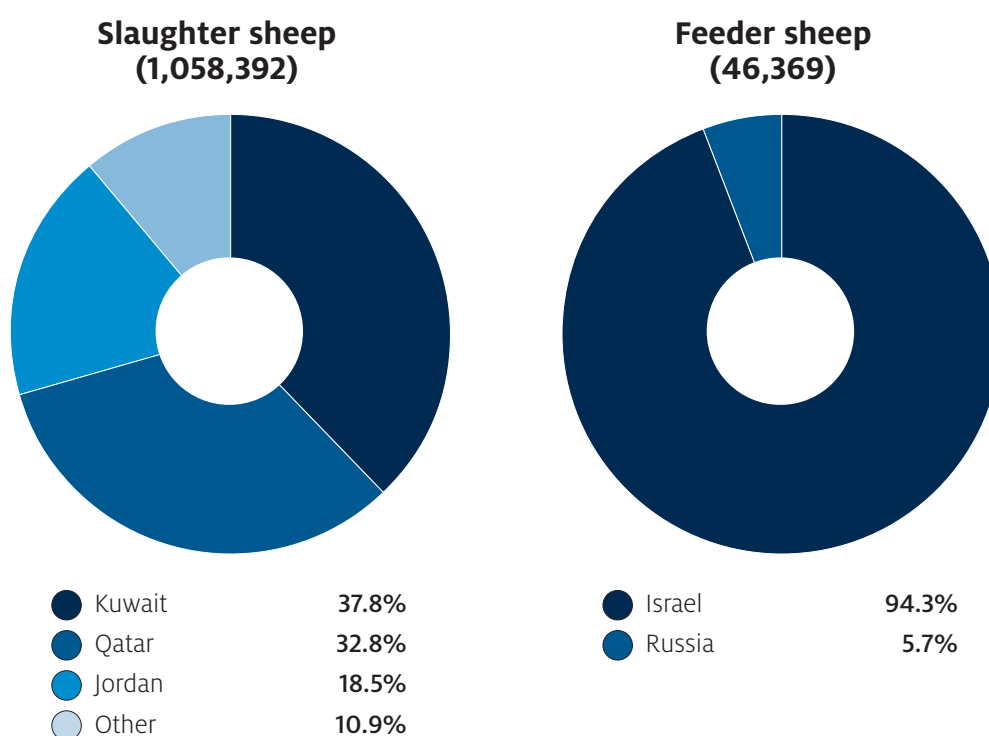
**FIGURE 2** Live cattle export markets 2019



In 2019 over 1.1 million sheep, valued at over \$142 million, were exported to 9 countries. Sheep for slaughter accounted for 92% of exports. Kuwait (37.8%), Qatar (32.8%) and Jordan (18.5%) were the largest export markets for slaughter sheep. Malaysia, Oman, Singapore and the United Arab Emirates accounted for the remaining 14.8% (Figure 3). Israel (94.3%) was the largest export market for feeder sheep. Russia accounted for the remaining 5.7%.

In late 2020 the Qatari Government ended the subsidy paid to its Australian lamb importation program. In April 2021 the department notified industry that it had revised export conditions for sheep and goats exported to the Kingdom of Saudi Arabia (DAWE 2021a).

**FIGURE 3** Live sheep export markets 2019



Other livestock in the feeder and slaughter trade include buffalo and goats. In 2019 over 4,000 slaughter buffalo were exported to Vietnam which accounted for 86% of total trade. In 2019 over 5,000 feeder buffalo were exported to Indonesia (77%), Malaysia (18%) and Vietnam (4%). In 2019 over 6,800 goats were exported for slaughter to Malaysia. All buffalo were transported by sea, while the goats were all transported by air.

In November 2020 there were 50 companies licensed to export livestock. In 2019 the department issued over 1,100 livestock export permits and 1,300 health certificates. During this period there were 430 sea and 171 air consignments.

## 2.2 Breeder livestock exports

The remainder of exported livestock are used for breeding purposes. Species exported for breeding include alpaca, buffalo, camelids, cattle, deer, goat and sheep. Cattle, sheep, and goats represent most of these exports.

Cattle account for most exported breeder livestock (Table 1). In 2019 China (80%) was the main export market for breeder cattle. In 2017 breeder sheep exports decreased by 68% with lower numbers being shipped to China and Malaysia. In 2018 breeder sheep exports increased by over 400% due to an increase in the market to Russia. Breeder sheep exports decreased again in 2019 and remained constant in 2020.

Since 2016 deer and camel exports slowed to the point where there were no further exports from 2017 and 2018 respectively. There has been a decline of alpaca exports since they peaked in 2017. In 2018 breeder goat exports increased by over 83%, due to an increase in exports to China.

**TABLE 1** Breeder exports, 2016 to 2020

Species	2016	2017	2018	2019	2020
Cattle	137,209	106,590	127,289	174,192	145,057
Sheep	12,194	3,869	20,043	13,738	14,143
Goat	5,852	5,173	9,508	9,242	5,093
Buffalo	0	125	10	657	366
Alpaca	243	1,801	870	148	126
Camel	61	67	4	0	0
Deer	80	0	0	0	0
<b>Total</b>	<b>155,639</b>	<b>117,625</b>	<b>157,724</b>	<b>197,977</b>	<b>164,785</b>

## Chapter 3

# Application and assessment

### 3.1 Pre-export application requirements

Exporters must have a livestock export licence to apply for a livestock export permit and health certificate. The export licence is issued under the conditions of the *Export Control Act 2020* and is valid for 1 to 5 years. An exporter can be an individual, partnership or body corporate. Exporters must obtain a livestock export permit and health certificate to be able to export a consignment of livestock from Australia.

#### 3.1.1 Approved arrangement

The exporter must have an approved arrangement, or an exemption as a small and infrequent exporter. An approved arrangement sets out the exporter's operations to manage the preparation and certification of exported livestock. An approved arrangement allows the export of an unlimited number of consignments and unlimited head of livestock over the licence period. Exporters granted a small and infrequent exporter exemption may only export 400 or fewer livestock in 4 or fewer consignments over a 12-month period. Approved arrangements will be the subject of a separate inspector-general review.

All export documentation must be prepared and maintained in line with the exporter's approved arrangement, regulatory and importing country requirements. The approved arrangement includes the need to have several other documents, discussed below, approved by the department before the exporter can submit a notice of intention to export (NOI). Relevant export documentation is assessed or verified by the department when considering an application for a NOI, an export permit and a health certificate. Documentation is also examined during an approved arrangement audit.

## Standard export plan

An exporter's standard export plan (SEP) demonstrates how they will meet all relevant Australian Government and state and territory legislation, standards and importing country requirements for the market, species, class and mode of transport for which it intends to export (DAWE 2021b) – for example, 'slaughter cattle to Vietnam by sea'. Where market requirements are similar, the SEPs can be combined into a single SEP for 2 or more markets.

The intention of the SEP is that it is approved once by the department and is used by the exporter to develop consignment specific export plans (CSEPs) that do not require subsequent approvals for individual consignments. An exporter can only submit a NOI and prepare consignments where an approved SEP is in place.

The SEP references supporting documents that an exporter must have to demonstrate that requirements will be met. For example:

- if an importing country required a consignment of sheep to be inspected 48 hours before loading, the exporter would need to obtain an Australian Government accredited veterinarian (AAV) inspection declaration
- if a consignment includes heavy cattle or buffalo, the respective management plans for this must be invoked and operationally executed.

## Approved export program

The exporter must have an approved export program (AEP). An AEP contains a program of activities (or instructions) that the exporter uses to direct a land-based AAV to undertake when preparing a consignment for export, and where relevant, activities for the shipboard AAV accompanying a consignment exported by sea. These activities ensure the livestock meet importing country requirements and the health and welfare outcomes required by ASEL.

The AEP must include AAV land-based instructions which correspond to the SEP and operates in a similar fashion – that is, providing a template for inclusion in the CSEP. An exporter can only submit a NOI and prepare consignments for a market, species, class and mode of transport where an approved AAV land-based instruction is in place. When an AAV is required to accompany a consignment exported by sea, the exporter must have an approved AAV shipboard instruction that outlines the activities required to be undertaken during the voyage.

The AEP must include how an AAV should demonstrate compliance with their instructions and reference supporting documents. An AEP may contain different programs of activities for different importing countries, livestock, and methods of transport (air or sea). Activities may include:

- examining, testing or treating the livestock
- monitoring the health and welfare of the livestock
- identifying or removing livestock unfit for export
- keeping records of the implementation of the AEP.

Any relevant AAV land-based instructions are added to the CSEP and provided to the AAV for each consignment.

### Consignment specific export plan

The CSEP provides details of a particular consignment of livestock for export. A separate CSEP must be prepared for each consignment. The CSEP is intended to be developed from the exporter's approved SEP and AAV land-based 'templates'.

The CSEP details the measures that will be taken that are specific to that consignment. This may include:

- dispensations from the importing country
- specifying date ranges and scheduling for treatments to occur
- noting whether discretionary requirements under ASEL will be invoked
- nominating the AAVs, premises to be used, and transport operators
- naming the vessel and proposed route
- references to the travel and load plans developed for the consignment
- nominating whether any management plans will be invoked for the consignment.

If the exporter is on the provisional performance level or full document inspection, the CSEP becomes part of the document requirements for each consignment. All other exporters may be required to produce these plans during an audit of their approved arrangement, and it is expected to be the document governing the exporter's operations during the preparation and delivery of a consignment.

### Management plan

An exporter must have a management plan to export a particular type of consignment or class of livestock. A list of management plans is available in Appendix B. The department may require an issue specific management plan from an exporter whose previous consignments had a notifiable mortality incident.

The management plan must include details of how the exporter will manage the sourcing, preparation and transport (land and sea/air) of the livestock including:

- details such as the age, breed, species or weight of the livestock covered by the plan
- inspection and segregation
- livestock health and treatments
- feeding and water requirements
- loading and penning arrangements
- livestock monitoring and inspections during the voyage or air export journey.

## 3.2 Notice of intention to export livestock

A licensed exporter must submit a NOI to the department to be able to export livestock. Exporters need to submit their NOI at least 10 working days before departure or 10 working days before any quarantine or isolation begins (Export Control (Animals) Rules 2021). The department must assess and approve all NOIs before the exporter can apply for an export permit and health certificate for a consignment of livestock.

Exporters can submit NOIs to export livestock by air or sea. Exports by air account for a small proportion (3%) of exported livestock, with sea transport accounting for the majority.

The department uses the 10 working day period to assess documents and plans that are relevant to the export consignment. These may include documents such as import permits that reference the importing country requirements. Additionally, other elements of the exporter's arrangements and documentation are verified. These can include:

- livestock exporter licence
- exporters' approved arrangement for the export market
- approved management plans
- registered establishment or approved premises details
- AAV and stockperson details
- exporter supply chain assurance system approvals
- any dispensation or other similar requirements.

### 3.3 Application for export permit and health certificate

The exporter can submit an export permit and health certificate application once the NOI has been approved. The exporter will book the regional veterinary officer (RVO) for a livestock inspection. The inspection cannot proceed until an application has been received by the RVO. Ideally the aim is to have the application and all documents reviewed prior to undertaking the inspection.

Provisional exporters or exporters on full document inspection are required to submit all documents for verification by the RVO. All other exporters only need to provide core documents unless they are requested to provide additional documents (see 3.3.2).

#### 3.3.1 Core documents

The purpose of the core documents is to provide the RVO with the evidence they need to complete the health certificate in preparation for issuance. The core documents list only includes documents which have details that must be entered in the health certificate. Examples of core documents are:

- an import permit issued by the importing country
- any dispensations and transit permits
- laboratory test reports
- livestock treatment records
- reject lists

The exporter must provide core documents to the department as part of their online application. The department has 3 categories of core documents for each market, based on complexity. There are 32 countries listed in this regard. Livestock are classed as breeder or feeder and slaughter class (DAWE 2021c).

Countries that import Australian livestock have their own biosecurity requirements that must be complied with. These are determined by importing countries and are generally similar to the objectives of Australia's biosecurity framework, which is aimed at reducing the risk of invasive pests and diseases entering and establishing.

The department maintains the online Manual of Importing Country Requirements ([Micor](#)) database to access information on what is required by importing countries. However, it is the responsibility of the exporter to independently verify requirements for their consignment to ensure they have the latest information. The exporter is also required to obtain the relevant requirements and documents from countries that do not have agreed protocols in place.

### 3.3.2 Additional information

When a consignment is proceeding without any issues being identified there is little need to request documents in addition to the core documents. However, there may be situations that require additional information. For example, an RVO might observe that some breeder cattle appear pregnant and request a copy of the pregnancy certificates to resolve it, or livestock may be observed that require a management plan to be invoked and the management plan may need to be examined. All approved documents are available in the department's online Tracking Animal Certification for Export (TRACE) system for RVOs to access (the limitations of the TRACE system are discussed further in 3.5). However, CSEPs are only required to be provided and loaded into TRACE by provisional exporters or exporters on full document inspection. If the RVO needs to examine a CSEP from an exporter on performance level 1 or above the exporter may be requested to provide it.

## 3.4 Tracking animal certification for export system

Exporters submit their NOI application through TRACE, the department's electronic submission platform. This generates a consignment identification number (LNC) and a consignment page. Once the NOI is approved, the exporter can upload their application for an export permit and health certificate through this page. This action triggers the RVO document assessment and livestock inspection (Figure 4).

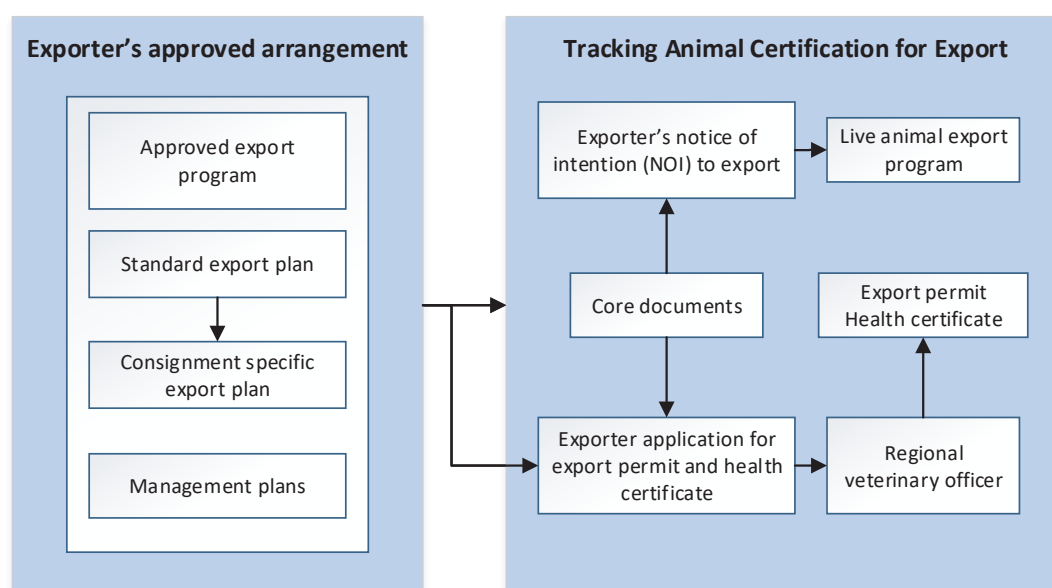
The amount of documentation required is dependent on many factors, including the importing country, species, class, mode of transport, and the exporter's performance level. Departmental officers assess whether the information is acceptable or if additional information is required. The officers also check that the exporter's licence and import permit (from the importing country) are valid and whether there are any conditions placed on the exporter.

The exporter contacts the department if any variations to the consignment occur. Variations can include changes to importing country requirements, livestock numbers and lines or AAVs and stockpersons. The department notifies the exporter as to whether the NOI application is approved. The RVOs assess the core documents and schedule an inspection time.

TRACE is also used to store official correspondence generated during the consignment review and approval process.



**FIGURE 4** Process for notice of intention to export and application for export permit and health certificate



### 3.5 Observations and findings

The inspector-general understands that the key risk the department is seeking to control through the NOI process is the alignment of the consignment with the importing country requirements. This is a high-consequence risk to control because of the potential for a misalignment to result in livestock being stranded at a port or airport. A worse scenario is a consignment being rejected at an importing country's airport or port, creating a logistical and animal health and welfare incident of significant complexity with potentially high consequences for the livestock, the government, the exporter and the ongoing live-export trade. Departmental officers' time in assessing NOIs should be focused on this element of the application. Most other elements of the department's assessment in considering a NOI are essentially verification of an exporter's approvals/documentation that allows them to export to a particular market.

The operation of the online system is extensively manual, including checking additional verifications. Most of the verification could be automated as it relies on documents, licences and accreditations that have been previously approved by the department. There are few links between datasets such as the accreditation status of an AAV or stockperson and the status of a SEP.

Additional verification processes have sometimes been put in place in response to something that went wrong with a particular consignment. The process was then applied to all subsequent applications. The department should avoid putting in place additions to the process unless it provides a necessary and ongoing risk control. Changes to business processes of this nature should be within a continuous improvement review approach.

The manual nature of this system also raises significant issues with document version control. In this regard the inspector-general heard of instances where there was confusion over the status of a range of documents, with out-of-date or previous iterations of documents confusing assessment and decision-making. To deliver an effective and efficient regulatory function a single point of truth allowing all relevant departmental officers to access all up-to-date and approved exporter documentation in real time is needed. This would also allow officers to observe previous decisions and exporter performance records, facilitate efficient decision-making and focus on areas of risk, complexity or poor performance.

The NOI application processes are a key congestion point for exporters making applications. A modern system that allows an exporter to access a unique account has the potential to significantly reduce the administrative burden and facilitate compliance. The system could provide the capacity to populate applications with pre-existing approved documentation and accreditations and ensure accuracy with an automated decision system. For example, if an exporter's licence is expired, the automatic decision process would not allow progress until a valid licence is available.

NOI's are rarely rejected. On occasion the department has revoked an export permit due to changes in circumstances and delays, sometimes at the request of the exporter. However, the department commits significant resources to working with the exporter to try to resolve issues. In 2019 the department received 600 NOIs to export livestock. During the same period there were 1,996 variations to these NOIs. This represents a considerable amount of time and resources involved in administrative assessment, and iteration between the department and the exporter, with the average time for processing a NOI (without variations) being 85 minutes.

Variations to NOIs are not always needed. The inspector-general heard that sometimes minor variations resulted in a variation process being triggered. The department should only require major variations that are material to the consignment to be submitted, with most NOIs being updated at the end of the process. However, this approach is not communicated consistently to all exporters. There are no guidelines for exporters or department staff on what constitutes a significant enough change for a variation to be required. The department should provide guidance on what it considers to be a reasonable threshold of change in a consignment to trigger a variation.

Application and decision processes should be underpinned by business process mapping with detailed standard operating procedures, performance metrics and service levels. The department has made some useful progress in this regard, but further granularity is required. Applications could be triaged into simple and complex based on a risk approach:

- Simple applications – identified by the nature of the application. For example, an exporter that undertakes consignments frequently, has little variation between consignments, and demonstrates consistently high compliance could be considered a standard applicant. A simple decision path should result in a quick decision with a simple and consistent instrument issued. Some exporters believe that the time frame to submit an NOI for this kind of application could be reduced.
- Complex and unique applications – informed by intelligence, analytics and previous performance. These may be proactively case managed, or account managed, to solve problems and accelerate decision-making. Standard operating procedures should be regularly reviewed to incorporate lessons from complex applications.

The inspector-general understands that the department is currently developing and trialling a risk-based approach to streamlining the NOI process and encourages this. However, as discussed in section 4.6, process streamlining should also be looked at holistically and a single application and more integrated end-to-end process may provide opportunities to control risks at the optimal point and increase efficiency.

The department will be changing its livestock export IT system with funding from the Busting Congestion for Agricultural Exporters package (DAWE 2020b). It is important that any new changes include the ability to analyse exporter and market performance data so that a risk-based approach can be used, and improved over time, including to streamline the NOI application process.

It is important that the application process becomes more digitised and automated to increase efficiency for applicants, ensure cost recovery is fair, and allow departmental officers to focus on more complex consignments and controlling important risks.

The inspector-general understands that the department's approach to upgrading the TRACE system is currently through a number of functionality enhancements. While this will undoubtedly improve some specific aspects of the current process it falls short of providing the necessary step-change in IT system support that is required to deliver an efficient and effective regulator and an efficient regulatory environment for industry. See the inspector-general's recommendation 2 in the review [Implementation of Moss review recommendations](#) for additional discussion (IGLAE 2020a).

The livestock export system is not currently included in the department's Next Export Documentation System (NEXDOC). NEXDOC will be used to improve product traceability and reporting and to digitise and automate manual documentation and assessment processes for export commodities. It is likely that this system will be continuously upgraded and improved over time. If the department persists with a bespoke system for livestock exports there is a risk that it will not benefit from regular upgrades and improvements. Irrespective of the approach taken, the current TRACE system should be replaced while the department has the benefit of the Australian Government's Busting Congestion budget investment.

### Recommendation 1

The department should replace the TRACE system with a modern IT system that supports:

- streamlined application processes with automated verification of pre-existing approvals
- single point of truth for an applicant's documentation, decision and compliance history (for both applicants and departmental officers).

### Recommendation 2

The department should streamline the notice of intention to export (NOI) assessment and decision-making process by:

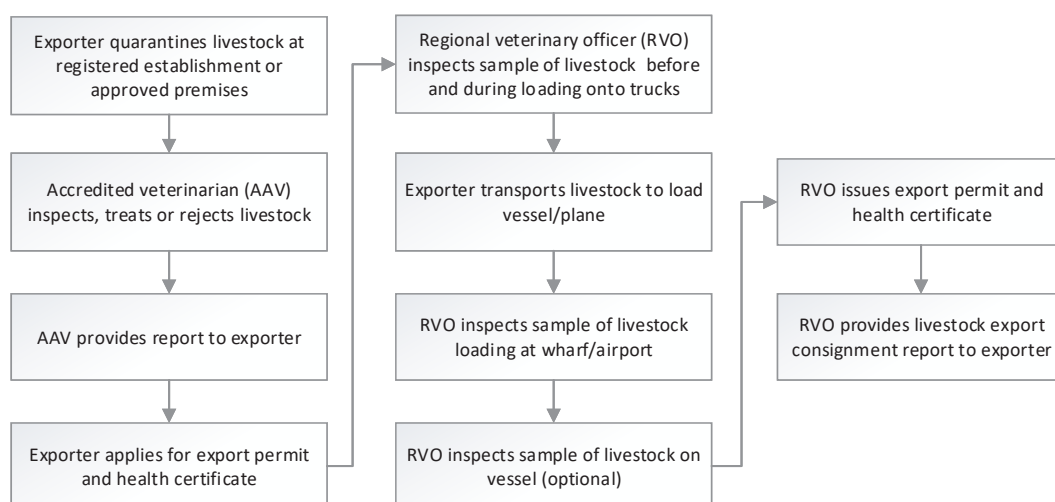
- implementing a risk-based NOI assessment process to redirect its resources to higher risk consignments and provide faster decisions for lower risk consignments
- publishing updated policy guidelines that define thresholds that trigger the need for a variation to the NOI application to be submitted.

## Chapter 4

# Export permit and health certificate approval

Livestock can undergo final preparation for export once the exporter has submitted their notice of intention to export (NOI) into the department's TRACE system (Figure 5).

**FIGURE 5** Overview of livestock inspection and clearance process for export



## 4.1 Australian Standards for the Export of Livestock

The Australian Standards for the Export of Livestock (ASEL) sets the minimum animal health and welfare requirements the livestock export industry must meet to ensure livestock are appropriate for export. The standards are applied to manage the risks to livestock health and welfare throughout the supply chain, from farm sourcing to disembarkation overseas. The standards apply to cattle, sheep, goats, buffalo, deer and camelids exported by air or sea (DAWE 2020a).

Failure to comply with ASEL may result in refusal to grant an export permit and health certificate. It may also result in regulatory action.

An exporter's approved arrangement must ensure that livestock are sourced, transported, prepared and exported in accordance with ASEL. All operational procedures must be set out to comply with ASEL.

There are several stages in the export process where livestock must be checked by veterinarians or competent stock handlers to ensure livestock are fit to load in accordance with the land transport and ASEL standards and do not show signs of rejectable conditions at the time of observation. These are:

- selecting livestock prior to loading for land transport at the source farm or saleyard
- unloading into the registered establishment
- while in quarantine
- during loading of livestock onto transport
- immediately before they are loaded onto the vessel or plane
- during stages of air transportation or sea voyage.

Exporters and their agents, and producers also put important effort into ensuring that livestock are produced and sourced to ensure they are appropriate for export.

## 4.2 Registered establishments and approved premises

Registered establishments (sea) and approved premises (air) are the facilities where the livestock are prepared for export. These facilities must be operated and maintained in compliance with ASEL. The exporter may be the owner and occupier of the establishment, or it may be owned and occupied by separate companies. Registered establishments are audited yearly against their approved manuals of operation (which demonstrate how the facility will be managed to achieve ASEL compliance). Approved premises are approved for each consignment, do not have operational manuals and are not audited annually (they are usually inspected the first time they are approved and may be inspected for subsequent approvals).

The occupier of the registered establishment is not necessarily the livestock exporter. The inspector-general heard that this had sometimes led to a lack of clarity as to which party was responsible for compliance during this element of a consignment, and whether the registered establishment's operations manual or an exporter's approved arrangement was the governing instrument. This issue will be examined in a future review into approved arrangements and livestock export licences.

For an occupier to register their establishment for livestock export they must complete an 'application for livestock premises registration' form. This requires that all persons who have the authority to direct the export operations are listed. The occupier must provide:

- a registered establishment operations manual which meets requirements outlined in the Export Control (Animals) Rules 2021 and ASEL 3.1 (such as requirements for operational management and control, animal identification, animal health and welfare monitoring, rejected animal management, and record keeping)
- evidence that the applicant has control of day-to-day operations
- state or territory approvals
- an accurate map and plan of the establishment
- security measures
- details of any previous convictions (including for any associates)
- any variations (for example, to the establishment's livestock holding capacity, its design, or livestock species to be prepared for export).

The department conducts an initial assessment followed by an onsite audit of the establishment. Registered establishments are registered for 5 years. If any changes are made to the establishment's operation, the occupier must amend the operations manual accordingly and apply for a variation. The department requires operation manuals to be approved every 5 years.

Livestock that are to be exported by air and require pre-export quarantine or isolation are kept at approved premises. The NOI application incorporates an application for approval of the premises. (DAWE 2021d). The regional veterinary officer (RVO) may be required to conduct an onsite inspection of the premises before approval. The inspection must consider the isolation or quarantine requirements of the importing country. If none are specified then, as a minimum, there should be no nose-to-nose contact possible between livestock that are not part of the consignment. Once inspected and approved the premises is recorded on the departmental register of approved premises.

## 4.3 Inspection regime

The inspection regime is where 'the rubber hits the road' for all livestock exports. This is where the RVOs monitor the compliance of the exporter, registered establishment or approved premises, and of the AAV in undertaking their operations consistent with legislative requirements, ASEL requirements for animal health and welfare, and importing country requirements.

Essentially the department's 'upstream' approval and assessment of licences, approved arrangements, and AEPs should be given operational effect by the exporter, AAV, and registered establishment/approved premises if they are operating as intended. Hence the inspection regime is a critical compliance monitoring activity and the decisions to issue an export permit and health certificate are important as they represent the culmination of the process to export a consignment.

Livestock exported by sea are initially inspected at the registered establishment by the land-based AAV. The AAV is contracted by the exporter and is responsible for performing export operations outlined in the AAV land-based instructions in the AEP.

The AAV provides a report to the exporter that includes the number of livestock to be exported. The report also includes the number of rejected livestock. This can be individual cattle and buffalo or a percentage of sheep or goats in a pen. The AAV is responsible for providing declarations that inspections, tests and any treatments have been completed in line with importing country requirements. Importantly, the AAV is responsible for providing written assurance that all of the loaded livestock are fit to travel, in accordance with ASEL.

The RVO then undertakes a range of assurance inspections depending on the exporter and the consignment. For provisional exporters and exporters on full inspection the RVO inspects all livestock. For all other exporters (described as performance level 1 and above) the RVO inspects a sample of livestock. A statistically valid sample size table is provided to RVOs to guide the number of livestock to inspect. The table is derived from the sample size calculator provided by the National Statistical Service (ABS 2014). The RVO may choose to increase the sample size or inspect all animals if they are concerned that animal health and welfare, importing country or loading requirements may not have been met.



For livestock exported by air transport, the RVO inspects the livestock at the approved premises if there are more than 400 small ruminants or 100 large ruminants. The inspection occurs at the airport for smaller numbers of livestock. Approved premises are often located on a farm and have departmental approval for assembling and quarantining livestock for export by air on a consignment-by-consignment basis.

Air transport exporters are understood to prefer to have their livestock inspected by the RVO at the approved premises as any additional rejects identified can then be removed prior to transporting to the airport. The guidance table indicates that the number of livestock required to be inspected is reduced when they are inspected at approved premises. For example, at an approved premises 278 sheep would need to be inspected from a flock of 1,000, whereas 399 sheep inspected at the airport require 100% inspection.

For exports by sea the RVO may conduct another inspection, additional to the inspection at the registered establishment, when the livestock are being loaded for transportation from the establishment to the wharf, and during loading of the livestock onto the vessel. The RVO may also board the vessel and undertake a final inspection (note that this has been constrained by COVID-19 requirements). All livestock that were unfit to travel should have been rejected prior to loading as it is difficult to remove them from the vessel once loaded, both physically and because of quarantine issues.

If an RVO identifies potential compliance issues during livestock inspection or documentation verification, they have the discretion to request to see additional documents and to undertake additional livestock inspections, as appropriate. The inspector-general has heard that in some cases the RVO has needed to request the documents from the exporter as they have not had access to them through the departmental system – for example, specific management plans that may have been invoked but are not readily accessible on TRACE, or consignment specific export plans that were not previously required and have not been entered in TRACE by the exporter. The inspector-general understands that recent upgrades to TRACE now provide more ready access to these documents for RVO's.

Any noncompliance identified by the RVO during their inspection is communicated to the exporter and recorded in the livestock export consignment report. In some cases, photographs or video footage are taken as evidence.

The livestock export permit and health certificate are issued after the final inspection of livestock is undertaken by an RVO at the port or on the airfield. After the livestock export permit is granted, the livestock must leave Australia within 72 hours unless an extension is approved.

## 4.4 Livestock export consignment reports

Livestock export consignment reports (LECRs) are prepared by RVOs for each consignment that they inspect and determine. The LECR is where any issues and potential or actual noncompliance identified during livestock inspection and document verification is recorded.

The department uses LECRs as the record of compliance monitoring of exporter performance, and as a mechanism for feedback to exporters. Assessment of the consignment (physical inspection of livestock and corresponding document verification) is recorded in an LECR as an impact level rating which can affect an exporter's future performance rating and the frequency of systems-based audits they will receive (Table 2).

**TABLE 2** Impact level of a livestock export consignment report

Impact level	Noncompliance	Impact on export
<b>Compliant</b>	No issues or low level or accidental oversights affecting a few individual animals or documents.	None, if rectified promptly
<b>1</b>	Failure indicating carelessness or shortcuts taken by the exporter's staff but no failure in the exporter's systems. Some individual documents are incomplete or missing.	Export may proceed if rectified within 4 hours
<b>2</b>	Failure that indicates an error, gap or lapse in an exporter's systems, or disregard for a process or requirement.	Export may proceed if rectified within 1 day
<b>3</b>	Failure of the exporter's systems, and/or negligence or disregard for processes or requirements. There are significant errors or missing data that may affect livestock health and/or welfare during export, or the export plan may not meet importing country requirements. A proportion of animals do not meet ASEL or importing country requirements and/or a significant number or components of a type of documentation may be incorrect, incomplete or missing.	RVO will consult a principal veterinary officer (PVO); the export permit may be refused
<b>4</b>	Flagrant disregard for systems and processes, suspected fraudulent or criminal behaviour by the exporter or the exporter's staff. Whole classes of documentation are missing, or serious animal health and/or welfare issues are identified.	RVO will consult a PVO; the export permit may be refused; the approved arrangement may be suspended and referred for further investigation

If an impact level 3 or 4 has been identified, the application for an export permit and health certificate may be refused. An exporter may be able to export the livestock consignment at a later time provided the identified issues have been rectified and a new NOI is submitted to the department. The standard 10-day time frame for NOI assessment applies but may be waived on a case-by-case basis.

Where the rating is 'compliant' the LECR logs that the livestock export consignment has satisfied all importing country, legislative and ASEL requirements prior to departure. For impact level ratings of 1 and above the consequence that arises from the rating is applied as per the department's performance management and compliance guidelines. For the consignment itself, time limits are in place for rectification of the issue before the consignment can proceed. The consignment can proceed if the issue is rectified within 4 hours for impact level 1 and within 1 day for level 2. For levels 3 and 4, rectification or export permit refusal are determined on the specific circumstances.

LECR impact ratings and audit outcomes are used to determine an exporter's performance level. Performance level 1 will require an audit every 2 months, level 2 every 3 months, and level 3 every 6 months.



An exporter may progress through the performance management framework based on compliant outcomes of audits, livestock inspections and documentation verification. However, if issues are picked up during these processes, an exporter may remain at a particular performance level or may regress through the framework and require additional compliance monitoring audits by the department. For example, if an exporter is issued an impact level 1 without issues in the previous cycle, they will still drop a performance level if the audit results in a marginal finding. Any noncompliance recorded during an export operation at a registered establishment is recorded against the exporter, not the occupier (if they are different).

The inspector-general heard that noncompliant observations and issues recorded by RVOs in LECRs are referred to the department's audit team. However, the audit team may not audit the exporter or registered establishment for 6 months or more, which can contribute to a lack of clarity as to the specific issues to be examined as part of the audit. The use of visual recording by the RVO would enable the auditor to better see and understand, and to target the audit appropriately. The auditor can also use visual recording to show whether the issue has been corrected or still exists. In both cases the evidence should be made available to the exporter or the occupier of the registered establishment.

## 4.5 Audits

The department uses audits extensively as a compliance monitoring tool and as a de facto non-compliance sanction. Audits are conducted on registered establishments and on exporters approved arrangements.

The department operates an annual schedule of audits for registered establishments. The scope of the audit is generally similar to the initial registration audit (section 4.2). Audits are conducted whether livestock are present or not. The audit examines the occupier's approved operations manual, physical establishment and consignment documentation and if livestock are present, the actual operation of the establishment in real time.

The department also operates a schedule of audits of exporters determined by their performance level. An audit examines approved arrangement and consignment related documentation retrospectively and may also examine specific issues identified in LECRs. The department uses audits as a primary method of sanctioning poor performance and non-compliance. For example, if an RVO detects non-compliance during a livestock inspection, they will record it on the LECR and this may affect their performance level, resulting in an increase in the frequency of audits. The department's live animal exports program will refer the specific noncompliance to the audit services team to schedule an audit to address the issue. These audits can be conducted up to 6 months after the non-compliance.

For registered establishments, audit outcomes may be provided to importing countries to maintain eligibility to hold and prepare livestock for export to a market, notably Indonesia.

## 4.6 Observations and findings

The inspection regime and decision to issue an export permit and health certificate is one of the most important risk control points in livestock export regulation. This is where the department actively monitors compliance during the operational execution of the export of a livestock consignment. Accordingly, the department needs to focus carefully on all dimensions of this activity.

The inspector-general discussed the important role of AAVs in the review [Monitoring and reporting during livestock export voyages](#) (IGLAE 2020b) and made several recommendations intended to better engage, utilise, and oversee AAVs.

In seeking to improve the efficiency and effectiveness of the NOI, export permit and health certificate process, the department should consider opportunities to clarify the responsibility and accountability of the AAV for executing the AEP/SEP. RVOs should be assuring themselves that the AAV has been compliant, not repeating the work of the AAV. Examining the performance of AAVs should also be considered as part of consignment reporting, with the department monitoring their performance and compliance over time. The exporter should be the primary accountable party for any non-compliances detected. However, AAVs may also need to be held accountable for non-compliances arising from their work, in keeping with their independent accreditation and professional registration.

Authorised officers in the live animal exports program undertake the front-end NOI assessment and decision-making; RVOs, under the supervision of senior and principal veterinary officers, undertake the export permit and health certificate compliance monitoring and decision-making function for the department. It may be possible to better integrate the work of the authorised officer undertaking the NOI assessment and the work of the RVO, to remove any duplication and to ensure a coordinated end-to-end process. Regular discussion between these officers does take place. The inspector-general encourages this as a valuable way to identify potential issues in upcoming consignments, and issues that have arisen during consignments. This can help to identify streamlining opportunities as well as to mitigate risks and improve consistency. Ultimately the department might consider whether the NOI function should be more closely functionally aligned, or even co-located, with the RVO function (provided national consistency can be maintained).

The RVOs are departmental officers and professional veterinarians registered to practise at a state level. This professional responsibility is important but may place a burden on an officer whose primary role is as a regulatory officer but who also needs to be a qualified veterinarian. RVOs may feel that at times there is a compromise between their professional obligations as a veterinarian and those of a regulatory officer. For example, an RVO may feel responsible for the health and welfare of all the livestock in a consignment, rather than the AAV being primarily responsible for this. The RVO needs to satisfy themselves, to a reasonable extent as a regulatory officer, that the AAV has acquitted their responsibilities and complied with requirements. Clearly to do this they also need to be a qualified veterinarian.

The inspector-general considers that the department's RVOs are a highly professional asset for the department and that they need to be further supported in several ways. Firstly, work instructions and guidance material for RVOs should be clear on their responsibility as regulatory officers, to reduce any perceived compromise with their professional obligations as a veterinarian. This needs to be in the context of the clear responsibilities of AAVs for the health and welfare of all livestock in a consignment.

Secondly, professional development, guidance and training for RVOs should be targeted specifically at their role in relation to consignment assurance and inspection. This should include maintaining an active network among departmental veterinary officers across all regions and with the live animal exports program. This should drive consistency in approach and decision-making and provide a forum for issues to be raised, resolved and incorporated into guidance and training material.

Finally, the recommendations for improvement to the TRACE system in section 3 would provide an important improvement in the support to RVOs for their often time-constrained work by ensuring that approved documentation, history of performance, and records of any current or previous issues that may be relevant are easily accessible. This will assist RVOs in assessing potential risks posed by a particular consignment and focusing their efforts on those risks.

Engagement between the AAV and the RVO assigned to a consignment is important to facilitate clarity on any issues or concerns that arise through the process. In this regard the inspector-general heard that there may be an opportunity to improve the efficiency and clarity of health certificate requirements if the format and information details were in a more prescriptive template (similar to those used for exporting reproductive material). The department should consider whether this would be useful and, if so, pursue a co-design approach with AAVs.

The inspector-general acknowledges the Department's development of a process map for consignments, from NOI through to export permit and health certificate determination. This, in conjunction with updated NOI checklists and work instructions for RVOs for both sea and air consignments (with linked guidance, checklists and templates), provides a sound basis for all staff involved in the process to understand the end-to-end roles, responsibilities and workflows. It facilitates training and consistency and, importantly, underpins an understanding of performance and continuous improvement. This represents a sound step forwards in regulatory practice.

The next phase of this work should break the process down further into more granular 'swim lanes' to understand the specific roles and handover points within the department and between exporters, AAVs and registered establishments/approved premises. There appear to be opportunities for streamlining and reduced duplication if the NOI and export permit and health certificate process is viewed as an integrated end-to-end process within the department, and perhaps as a single application by exporters.

The inspector-general continues to advocate a risk-based approach to all dimensions of regulatory practice. The work the department is undertaking to streamline the consideration of NOI applications on a risk basis may also provide a basis for the inspection regime of RVOs to be adjusted to focus their time on consignments that pose greater risk and streamline those that are lower risk. This will require an update to the RVO's work instructions and guidance, including using the statistically derived sampling guidance increasingly as indicative only, to support RVOs considering the performance, history and other relevant intelligence to target their compliance monitoring effectively.

The RVOs' compliance monitoring efforts would be enhanced further if the department made the necessary shift in regulatory practice that the inspector-general recommended in the report [Monitoring and reporting during livestock export voyages](#) (recommendation 4(d), IGLAE 2020b), which also aligns with Moss Review recommendation 7. In summary this is to undertake risk-targeted multidisciplinary inspections of some consignments involving, for example, departmental auditors in addition to the RVOs. The current approach could be described as placing disproportionate weight on documentation and process, rather than testing and documenting compliance with the outcomes set in legislation and ASEL during the actual operational activity of a consignment.

The inspector-general considers that the current approach to livestock export consignment reports contributes to this and is flawed in a number of ways. The LECR performance rating guidance is ambiguous and can lead to inconsistent application and unnecessary differences in view between exporters and the department. For example, there appears to be ambiguity in what constitutes a significant error in documentation, or a concerning proportion of livestock. The rating system may also create a tolerance of systemic low-level non-compliance, as well as not drawing an effective line in the sand on more significant non-compliance.

Impact level 1 and 2 ratings that relate to documentation non-compliances require correction within 4 hours or 1 day, respectively. Clearly where this is a critical issue for a consignment it needs quick correction – for example, if an importing country requirement is not met. However, the inspector-general has heard examples where administrative or technical errors that do not compromise animal health and welfare outcomes required by ASEL, or importing country requirements, have, under the current impact level ratings regime, required rectification during the course of the consignment. For example, the inspector-general heard of an instance where an exporter had indicated a 3-day quarantine period at a feedlot in their approved arrangement (heavy cattle management plan) but had only allowed 2 days for a particular consignment. The ASEL requirement is 2 days, so the required outcome would be achieved. However, as there was a technical non-compliance with the approved arrangement, time was spent on a variation to correct this during the consignment process to avoid recording a non-compliance.

This could place pressure on departmental staff and on exporters during the delivery of a consignment when their attention should be predominantly on ensuring ASEL and importing country requirements are delivered. Administrative and technical non-compliances need to be recorded and an appropriate regulatory response determined. However, this may not need to occur until after the consignment has concluded, with a view to systemic continuous improvement and proportionate regulatory response.

Currently the primary consequence of the majority of non-compliance, in addition to any immediate corrective action, is an increase in audit frequency. Audit is one of several important compliance monitoring tools the department has in place. Audits generally examine events in retrospect through scrutiny of documentation and systems. While this is important it does not examine the real-time operational activity that is meant to be governed by, and carried out in accordance with, documents and systems.

Additionally, audit is not generally considered to be a sanction and its use as one is likely to be ineffective in driving improvement in performance of exporters. It is an inefficient use of departmental audit resources, and an additional red-tape burden for exporters. The use of audits in this way may also have the unintended consequence of driving exporter behaviour in relation to documentation and systems to be audit ready post consignment, rather than for these documents and systems to be fit for the purpose of governing the operational execution of the consignment.

The inspector-general canvassed responding to non-compliances in regulatory practice in section 2 ‘Best practice regulation’ of the review [Monitoring and reporting during livestock export voyages \(IGLAE 2020b\)](#), specifically under the heading ‘Sanctions (detection and consequences)’; and in section 2.1 ‘Organising for strong regulatory practice – compliance and enforcement’ in the review [Implementation of Moss review recommendations \(IGLAE 2020a\)](#). The fundamental premise in better regulatory practice is to separately consider liability and culpability for each instance of non-compliance. It should be noted that a mitigating factor may be no or few previous non-compliances and an aggravating factor would be a history of non-compliance.

Determining liability (non-compliance) is a matter of fact and evidence. Under a proportionate response model, considering a regulatory response should be based on a broad assessment of culpability against a wide range of contextual factors, many of which may be unique to the individual case.

The inspector-general considers that – consistent with the review of and update to the biosecurity guideline for management of noncompliance (recommendation 8, agreed to by the department, in the [Review of the Exporter Supply Chain Assurance System, IGLAE 2021](#)) – a review of the Performance management and compliance guidelines – approved arrangements for livestock exporters (DAWE 2017) should be undertaken as soon as is practicable. The outcome should be to align them to a best practice approach to non-compliance and the application of a proportionate response model. The fundamental utility of performance levels will be an important aspect of this review. The inspector-general understands that this work is currently being undertaken by the department.

This should ensure that where the RVO identifies a non-compliance during the inspection process, it is recorded and an appropriate regulatory response is taken at an appropriate time. While alerting the exporter to the non-compliance as soon as possible is important, determining a regulatory response may require escalation and consideration by the department. It is obviously important to determine whether an immediate action can be taken to correct the issue and allow the consignment to proceed, or if it is significant enough to delay or cancel the consignment. While an immediate action may be considered as a mitigating factor in determining an appropriate regulatory response, it is not the only factor.

This should also result in a reset of the way in which audits are used, to ensure they are optimised as a critical, but not the only, compliance monitoring tool available.

Ultimately the outcome of livestock export regulation should be seen in desired behaviours and performance of the export industry. Accordingly, good communication between the department and those being regulated is critical, and never more so than when there are problems. The inspector-general heard that improved engagement and interaction between the department and exporters and AAVs is occurring in many instances. The inspector-general also heard that a debrief involving the exporter, the land-based AAV, the vessel master, the ship AAV/stockperson and the RVO was an important way of ensuring continuity for any issues or lines of livestock that might need particular attention during the voyage.

Post-consignment feedback from RVOs to exporters and AAVs was also understood to be appreciated. The inspector-general considers immediate verbal communication about issues, problems and non-compliances to be important. Follow-up verbal and written communication is also important to ensure that the issues are understood and the reasons for any departmental action are explained. It also ensures that the department provides industry players that might be the subject of an adverse finding the opportunity to provide information or perspective that may be important to its considerations.

Significant sanctions generally involve a formal opportunity to challenge them through appropriate appeal mechanisms. In the current LECR model, exporters can have their impact level ratings reviewed. Given the ambiguous nature of the LECR framework, and the flow-on implications of performance levels, it is not surprising that exporters may wish to seek a review of a rating. The departmental review of an LECR rating should be conducted by someone independent from the original decision-maker. This is important for the exporter to have confidence that a fresh set of eyes has undertaken the review. It can also benefit the department, as it can assist with consistency across geographically and functionally disparate areas.



The inspector-general also heard that the inherent ambiguity in determining impact ratings sometimes leads to tension and conflict between exporters, AAVs and RVOs. This is inevitable as the ambiguity of the ratings scheme, and subjectivity as to the health status of individual animals, may result in differences in professional opinion (see the report [Monitoring and reporting during livestock export voyages](#) and the department's subsequent work in developing a draft rejection criteria handbook to seek to reduce one area of subjectivity).

On a field trip to Fremantle, Western Australia, the inspector-general observed RVOs collecting photographic and video recordings of their observations. Ensuring that there is adequate evidence to support the conclusions the department may reach on issues or non-compliances is clearly important. The inspector-general also heard that, on occasion, there had been onsite tensions during inspections. In addition to ensuring that adequate evidence to support RVO observations is captured, the use of devices such as body cameras has the potential to ensure that discussions and differences in view remain constructive, professional, and focused on the evidence available.

### **Recommendation 3**

The department should consider a single integrated application process to include notice of intention to export, export permits and health certificates.

### **Recommendation 4**

The department should review the Performance management and compliance guidelines – approved arrangements for livestock exporters, including the livestock export consignment reports ratings, the way in which audits are utilised, and how this relates to performance levels, and the utility of performance levels.

### **Recommendation 5**

The department should implement a risk-targeted multidisciplinary audit process that is conducted during the notice of intention to export application and export permit inspection process (consistent with the inspector-general's recommendation 4(d) of the review *Monitoring and reporting during livestock export voyages*, and Moss Review recommendation 7).

### **Recommendation 6**

The department should trial the use of body cameras for regional veterinary officers and auditors for use during inspections and onsite audits.

## Chapter 5

# Fremantle model

### 5.1 Background

In July 2020 the Secretary of the Department of Agriculture, Water and the Environment wrote to the inspector-general to consider including a review of the Fremantle model in his work program. The inspector-general has included this in the livestock export permit systems and processes review as it is relevant to the regional veterinary officer (RVO) inspection regime and to export permit and health certificate decisions.

Preparation and loading of sheep onto vessels departing from Fremantle, Western Australia, occurs in a particular way known as the 'Fremantle model'. Under this model, livestock rejected under Australian Standards for the Export of Livestock (ASEL) criteria are identified as a percentage of the sheep held in each pen at a registered establishment (Appendix C). Some are identified or removed while at the registered establishment and more are removed as they are loaded onto trucks to depart for Fremantle Port. The main point of individual animal inspection, after livestock are inspected on arrival at the registered establishment, occurs as they are unloaded from the trucks and onto the vessel.

### 5.2 Reviews

In June 2011 the Australian Government announced an independent review into the livestock export trade following footage of mistreatment of Australian livestock in Indonesia. As part of the Independent Review of Australia's Livestock Export Trade (Farmer Review), Mr Bill Farmer AO visited Fremantle to view the inspection process at Fremantle Port and the registered establishment. He was concerned about the number of sheep he saw that were not fit for export and the inspection process he witnessed at the port. In the final report he recommended:

... that the current inspection regime prior to export from Fremantle be reviewed, to ensure that thorough individual animal inspection by the AAV is conducted (recommendation 4, Farmer 2011).

The department agreed to review the inspection arrangements for livestock exports from Fremantle to ensure they aligned with existing and future requirements of ASEL.

## 5.2.1 Fremantle Review Steering Committee

In July 2012 the department established the Fremantle Review Steering Committee to conduct a review of the Fremantle model (DAFF 2012). The committee was made up of representatives from livestock exporters, animal welfare organisations, veterinarians and the Western Australian Government. The report of the [Review of the Inspection Regime Prior to Export of Livestock from Fremantle Port](#) stated:

It is important to recognise that inspection, removal of injured animals and treatment is an inherent part of general animal care to ensure acceptable health and welfare standards (DAFF 2012).

Under the then Export Control (Animal) Orders 2004, the departmental authorised officer had to inspect the livestock before they left the registered premises (now known as registered establishments) and be satisfied that each of the livestock was fit to travel. An amendment to the Order allowed an authorised officer to be satisfied that the livestock were fit to travel without needing to be assured of the fitness of every animal in a herd. The arrangement was that authorised officers conducted a general 'flock' inspection at the registered premises. This did not normally involve drafting animals and did not constitute an individual inspection of livestock.

The inspection of livestock through the supply chain was proposed as the optimal method for reducing the risk that livestock not fit for export were detected and ensuring the:

- appropriate management or treatment of livestock with compromised health or welfare
- timely removal of livestock with conditions that could affect the health or welfare of other animals
- removal of livestock that were unfit for export.

The export industry has made significant improvements to supply chain management to reduce the risk and numbers of livestock that are not suitable for export from arriving at, or being accepted at, registered establishments.

The review compared the inspection process at Fremantle Port to those in Adelaide (South Australia) and Portland (Victoria). At Adelaide and Portland the primary detection and rejection of sheep that were unfit for export occurred at the registered establishment. The sheep were passed through a series of forcing pens, with livestock to be rejected being marked and removed through a final drafting race at the last pen prior to loading onto stock trucks. When the sheep reached the wharf they were unloaded into a large pen at ground level, with any additional or missed rejects removed prior to the remainder being herded onto the ship's loading ramp.

Two methods were used at Fremantle. The first was similar to the approach taken at Adelaide and Portland. The second approach, the 'Fremantle model', had the primary point of individual detection and rejection occurring at the wharf immediately prior to loading onto the vessel. Mob-based inspections were undertaken at the registered premises. However, in this model sheep are loaded onto stock trucks at the registered premises and then unloaded directly into a raised race and platform at the port. The Australian Government accredited veterinarian (AAV) stands at ground level and views one side of the animal. Any sheep identified as unfit for export are rejected and drafted from the race into an attached holding pen, with the remainder continuing along the raised race and onto the ship's loading ramp.



The review conducted a comparison report on reject rates and shipboard mortalities. The report found that Adelaide and Portland had similar results. They conducted both flock and individual inspections at the registered premises, which resulted in a higher rejection rate there (around 92%). Fremantle conducted a flock inspection at the registered premises and individual inspection at the wharf. This resulted in a higher rejection rate at the wharf (97%). The comparison report concluded:

Individual animal inspection is an important mechanism to ensure animal welfare outcome. At the point of individual animal inspection more unfit animals were pulled out from the export chain compared to the flock inspection (DAFF 2012).

The inspection process is pivotal for reducing the risk of injured and livestock unfit for export from progressing through to loading onto a vessel. In relation to livestock inspections, the review recommended:

The primary point for individual inspection should be at the registered premises and the facilities and inspection process must be designed to reliably assess each animal for fitness to travel and against all of the ASEL rejection criteria (recommendation 5, DAFF 2012).

It also recommended:

That at each point in the supply chain, inspection procedures and facilities are in place to allow the identification and removal of unfit animals in a timely manner to ensure that animals unfit for transport or export are not transported to the next stage (recommendation 7, DAFF 2012).

The principal purpose of the individual inspection in a consignment was to detect unfit animals and therefore reduce the risk of these animals being loaded onto a ship for export. For an inspection to be considered an 'individual inspection', livestock had to be presented to inspectors so there was the opportunity to view every animal. Assessing the health and welfare of animals in a mob was an essential part of routine monitoring and could be used in conjunction with, but could not substitute for, individual inspection (DAFF 2012).

It should be noted that the ALEC industry representative dissented from the conclusions of this report indicating that the current model had operated successfully for 3 decades. Industry was concerned that their position and the information they provided in support of the Fremantle inspection process had not been adequately considered.

In 2018 Mr Philip Moss AM conducted an independent Review of the Regulatory Capability and Culture of the Department of Agriculture and Water Resources in the Regulation of Live Animal Exports (Moss Review). The review found that under approved arrangements export livestock were inspected on a sample basis at registered establishments, and that there was no requirement for the RVO to board the vessel (though they had the discretion to do so) to check loading and pen density.

The report concluded that the process could be strengthened by providing for full inspections of consignments on a random, unannounced basis, including at registered premises and once vessels have been loaded.

## 5.3 New policy

On 10 June 2016 the department issued policy advice on the management and removal of rejects for all livestock. Export Advisory Notice 2016–16 advised that an exporter:

- must have had the consignment inspected by an AAV
- must have removed all livestock ineligible for export due to the findings of blood or faecal test results
- should have removed livestock which do not meet ASEL or importing country requirements.

The department acknowledged:

... there can be circumstances where removing these livestock from a consignment prior to inspection may not result in the best animal welfare outcome. In these cases the exporters must provide the authorised officer with a written plan for managing rejected livestock at the time of inspection. The plan must clearly identify the rejected animals, their location, reason for rejection and when they will be removed from the consignment. The inclusion of tag numbers to identify animals where possible is encouraged (DAWR 2016).

The department also issued an example plan for managing rejected livestock. This plan suggested that exporters could record the percentage of animals in a pen that should be removed (without identifying individual animals) – for example, ‘shed 2 contains 5% of sheep with pinkeye’. This method has been adopted by industry in practice and means that the inspection at the registered establishment by the RVO can only confirm that reject animals may be removed, even though they have not been individually identified.

Any rejected animals identified by the AAV must be removed from the consignment before loading onto trucks. The rejected animals cannot be reassessed by an AAV and put back into the same consignment. However, the rejected animals can be included in future export consignments if they are fit to travel.

The notice advises exporters to record any actions taken regarding rejected livestock, and states that authorised officers may take photos for identification and record keeping.

### 5.3.1 Legislative requirements

Livestock export is regulated through a framework that comprises the *Export Control Act 2020* and the Export Control (Animal) Rules 2021.

Section 4-2 of the Rules requires that construction of a registered establishment and its facilities must comply with ASEL Standard 3, Management of livestock in registered establishments. In April 2020 an updated version of ASEL (ASEL 3.1) was published.

Section 3.1.6(b) requires:

Livestock handling facilities must be designed, constructed and maintained to facilitate livestock handling, inspection and separation of individual animals that prevents injury and minimises stress.

Section 3.1.15 requires:

Livestock must be individually inspected at unloading, and inspected at least daily, to determine whether they are suitable for preparation for export. Any livestock identified as being distressed, injured or otherwise unsuitable for export (including the rejection criteria outlined in Standard 1 Table 1) must be rejected from the consignment, marked by a semi-permanent or permanent method and isolated from the rest of the consignment. Any other condition that could be defined as an infectious or contagious disease, or would mean that the animal's health or welfare could decline or that the animal would suffer distress during transport, also requires the animal's rejection from export preparation.

Also, Section 3.1.20 requires:

Daily monitoring of livestock health, welfare and mortality must include:

- a. inspection of all livestock by a competent stock handler
- b. rejection of any livestock and their management as per Standard 3.1.15.

### 5.3.2 Recent practice

The inspector-general has heard that the department considers that, in accordance with ASEL, all rejects should be identified, marked and removed at the registered establishment prior to loading on trucks, with inspections at the port during loading acting as a final safety net, including identifying any animals injured during transportation. This is the optimal approach to ensuring the health and welfare of animals, as it reduces the risk of any animals being missed and assures the RVO of high levels of compliance by the exporter.

However, the industry and AAVs have raised concerns that this approach would be counterproductive if undertaken at Fremantle facilities as it can lead to reduced animal welfare due to redrafting injuries and stress, and livestock in pens being spooked and sustaining injuries as they try to flee in a confined area. This concern was raised in 2020 when a sheep consignment was delayed due to a COVID-19 outbreak on board and new conditions imposed as part of an exemption to the prohibition required the rejection of a large number of sheep (case study 1).

When sheep exports resumed in November 2020 the department raised concern with exporters that ASEL requirements were not being met at the existing registered establishments. The department and industry worked over a period to develop what could be described as a progressive assurance process with improved sourcing, improved drafting and scrutiny at unloading, increased level of identification and removal of rejects at the registered establishment, and more detailed reporting by the exporter of rejects at each step provided to RVOs. The RVO changes included:

- increasing assurance by checking a sample of pens to see if the flock level assessment is accurate at the registered establishment prior to load-out
- checking to determine if the exporter's rejection process is working as it should during load-out
- checking to determine if the exporter's rejection process is working as it should at the port drafting facility
- checking a sample of livestock on vessels to see if there are rejects that have been missed and made it on board (restricted by Covid-19 requirements)
- checking the correlation between the quality assurance documentation and the flock assessment
- for all sheep exports out of Fremantle, requiring that the load plan, load order and rejects list be provided as core documents to all markets and that these inform the RVO's inspection.

## Case study 1

### Al Kuwait voyage to the Middle East, June 2020 (LNC 11558)

On 27 May 2020 the department received an application for exemption to export a consignment of 56,000 live sheep and 420 live cattle to Kuwait. The shipment was delayed after crew members aboard the MV Al Kuwait tested positive for COVID-19. As a result, the vessel was quarantined and could not export before 1 June 2020. Under the then Northern Summer Order 2020, exporters were prohibited to export sheep to Kuwait between 1 June and 31 October.

On 13 June the department granted the exporter an exemption subject to conditions. The conditions included:

- a minimum allometric stocking density of 0.037
- removal of sheep types averaging above 50 kg
- removal of sheep with wool over 20 mm in length.

To comply with the conditions, 27,600 sheep were rejected from the consignment, resulting in 33,341 sheep being exported to Kuwait. The Al Kuwait left Fremantle Port on 17 June and discharged in Kuwait on 1 July 2020.

The sheep consignment had been assembled at the registered establishment for some weeks before vessel loading occurred. The Australian Government accredited veterinarian (AAV) communicated that the identification of rejects at the registered establishment was improved because conditions such as digestive upset, inanition, shy feeding, lameness, pneumonia and shearing cuts were easier to detect as time went by and as the sheep settled into their new environment.

Specific departmental requirements for this consignment were outlined in the registered establishment instructions document. This stated that all sheep must be drafted and rejects clearly identified by marking before the regional veterinary officer (RVO) inspections at the registered establishment. Subsequently the RVO conducted a full inspection of 33,341 sheep, with less than 1% rejected by the RVO at that time. However, the exporter had earlier commenced redrafting and shearing approximately 6,000 sheep to seek to ensure they met the ASEL wool length requirements. The RVO advised the exporter that these sheep should not be included in the consignment as this would not comply with the ASEL requirement of 'at least 2 clear days between shearing and loading for export'.

In the end of voyage report, the AAV expressed significant concern that the methods required by the department at the registered establishment for this consignment led to poor animal welfare outcomes. The AAV claimed that the identification and removal of rejects from the undercover export consignment pens before loading for transport to the port was directly connected to some necropsy findings during the voyage. Evidence of trauma and crush injuries were noted in up to 7 necropsies and in up to 57 sheep of the 103 treated by the AAV aboard the vessel.

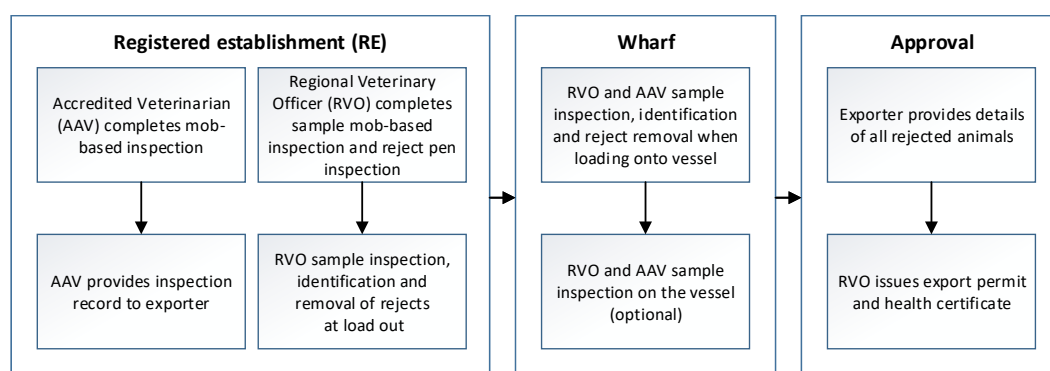
If the increased drafting and handling of the sheep to ensure rejects were removed at the registered establishment was a causative factor, the consequence of potentially including 6,000 animals recently off shears may have been significant.

## 5.4 Observations and findings

During March 2021 the inspector-general visited Fremantle and observed the inspection process for exporting sheep, including holding in pens, loading onto trucks and loading onto the vessel.

The inspector-general heard that there had been tensions between the department and the industry over the management of rejects. To the credit of both the industry and the department, this had resulted in a pragmatic solution to reject management based on a model that could be described as ‘progressive assurance’. As noted, this involved the industry increasing its level of quality assurance through the supply chain, with commensurate recording and reporting. It also involved the RVO undertaking assurance inspections at a number of points through this process, as illustrated in Figure 6.

**FIGURE 6** Fremantle sheep inspection process



The inspector-general considers tension between a regulated industry and its regulator as potentially a healthy indicator, particularly if it is a creative tension that leads to improved practices and outcomes. The progressive assurance approach that is now operating appears to be an example of this.

Registered establishments and approved premises play an important role in the health and welfare of livestock for export. They should be the central area where livestock are isolated, treated and determined to be fit for travel. This should also be the primary area where livestock unfit for export are identified and removed. Registered establishments need to adhere to both domestic standards (ASEL) and export standards (importing country requirements), which may be different for each consignment.

However, the legislative framework, including ASEL 3.1, is clear that identification and removal of rejects should be substantially completed before livestock are transported to the port. This has also been a consistent theme in the previous reviews into this issue.

The 2012 report found that facilities and infrastructure used in Fremantle did not always allow for the easy removal of rejected animals (DAFF 2012). This is not in dispute, and the inspector-general observed that the facility that was visited did not allow for the easy removal of rejected animals. The holding pens are 25 to 30 years old and were designed at a time when the industry operated quite differently. It is limited by:

- large pen sizes (700 animals) reducing the ability to mark, identify and remove animals as they are observed without risking injury to other animals in such a large pen – hence the flock/pen level estimates
- pens that can only be accessed through other pens, rather than directly from a race, which physically prevents the easy removal of individual animals or the redrafting of pens
- only one drafting point, essential for assessing livestock as they arrive at the registered establishment, but not configured for drafting at load-out
- no drafting points at load-out, putting pressure on staff who are loading to simultaneously observe, identify and remove rejects to the extent that this is possible.

At the wharf, sheep were unloaded from the trucks onto a raised platform where AAVs or stockman could view one side at eye level with the animals (Figure 7). Rejected sheep could be drafted into a separate pen and the remainder allowed to continue directly onto the ship's loading ramp. The rejected sheep were returned to the registered establishment later in the day. Most of the livestock rejected at the wharf did not suffer from injuries incurred while being transported to the wharf. The welfare of animals whose health is compromised to the extent of being considered not fit for export is less than optimal, as they are subjected to additional transport handling and potentially long holding times at the wharf.

While this process appeared to be efficient and to provide a good basis for AAV assessment of animals, there is still a risk that rejects will be missed due to the short time frames, high pressure and the manual nature of identifying and removing rejects. It is labour intensive for the AAV and exporter. Exporter staff fatigue, poor training or lack of attention could result in animals that should be rejected being missed and going directly onto the vessel. This can be exacerbated when loading of the vessel extends into the evening or night with poor lighting or weather conditions.

As discussed, the inspector-general considers that industry's increased rigour in progressive assessment and rejection, and the assurance undertaken by RVOs, to constitute a pragmatic approach to improving reject management. If the current ASEL requirements for reject management were strictly enforced at the existing registered establishments, the concerns of AAVs and exporters that poorer animal health and welfare outcomes would arise would be reasonable. However, the fundamental issue remains the disjunct between ASEL requirements and the dated infrastructure at registered establishments for inspecting and rejecting livestock.

Changes to pen sizes and pen access, additional races and increased redrafting capacity, including at load-out, are examples of improvements that would address shortcomings in meeting ASEL requirements. Raised platforms similar to those used at the wharf could also be implemented at the establishment load-out. Ultimately, determining optimal infrastructure improvements that meet business requirements and align with meeting ASEL requirements is a matter for industry and the department.



**FIGURE 7** Sheep inspection at Fremantle Port prior to loading onto a ship

Capital investment in upgrading aged infrastructure is a significant business issue with financial, scope and scheduling dimensions. However, the inspector-general's view is that the infrastructure as it is currently configured will continue to be unable to completely satisfy legislative requirements. Community expectations for improvement in livestock health and welfare are likely to continue to increase, and the science of what constitutes good practice is also likely to result in higher standards. In this context the regulator should not be expected to exercise its discretion indefinitely and should seek a commitment to a time frame for, and schedule of, infrastructure improvements.

The current Fremantle model represents a pragmatic approach by both industry and the department to balancing strict compliance with practical livestock management aimed at achieving the best animal health and welfare outcome within the constraints of aged infrastructure. However, it does not constitute the optimal approach prescribed by ASEL.

### Recommendation 7

The department should continue to use its discretion in relation to the Fremantle model provided:

- that where a registered establishment is physically unable to fully comply with ASEL the occupier agrees to develop and submit a program of works that would enable the registered establishment to fully comply, and a schedule and time frame for implementation of those works
- if the works and the time frame are accepted by the department as being reasonably practicable, the department consider an enforceable undertaking to ensure that the works progress over the agreed time frame so that the exporters and registered establishments can be progressively brought into full compliance.



## Appendix A

# Department's response



Australian Government  
Department of Agriculture,  
Water and the Environment

ANDREW METCALFE AO  
SECRETARY

10 November 2021

Mr Ross Carter  
Inspector-General of Live Animal Exports  
GPO Box 858  
CANBERRA ACT 2601

via email: [iglae@agriculture.gov.au](mailto:iglae@agriculture.gov.au)

Dear Mr <sup>Ross</sup>Carter

Thank you for providing your draft report on *Livestock export permit systems and processes* to the department on 11 October 2021, and for providing the opportunity to respond to your findings.

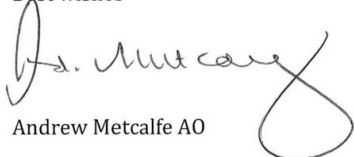
The department is committed to continuous improvement for live animal export (LAE) regulation. As identified in the recently released *Future Department Blueprint*, we aspire to being a world-leading trusted regulator. The Blueprint outlines the department's commitment to modernise and reform our approach to regulation. Our ability to reach its goal is greatly assisted by independent reviews such as yours.

The department agrees there are further opportunities to improve livestock export permit systems and processes to improve the efficiency of business processes and operational compliance monitoring. The department has already commenced several projects including through the LAE Roundtable Working Group and the government's Busting Congestion for Agricultural Exporters reform package. These include streamlining processes, improving IT systems, and increasing transparency. The projects are already delivering improvements including reduced processing time of notices of intention (NOI) to export livestock.

The department is currently progressing more than 60 digital and regulatory reform projects. This includes initiatives to modernise the department's ICT systems underpinning our export system, streamline our departmental processes, and make better use of innovative technologies for robust, real-time risk-based regulation.

In relation to your recommendations, the government agrees or agrees in principle with all recommendations. I have provided a detailed response in the Enclosure.

Best wishes



Andrew Metcalfe AO

# Department Response to Inspector-General for Live Animal Exports' Report Livestock Export Permit Systems and Processes

## Recommendation 1

The department should replace the TRACE system with a modern IT system that supports:

- streamlined application processes with automated verification of pre-existing approvals
- single point of truth for an applicant's documentation, decision and compliance history (for both applicants and departmental officers).

### Department's response

#### *Agree in principle*

In the short-term, the department is implementing enhancements to the TRACE system that will streamline the application and assessment processes required for exporting livestock. These enhancements will improve the TRACE system's ability to:

- automatically advise exporters about required information (core documents).
- automatically verify information such as pre-existing approvals that the department holds in different databases.
- provide exporters with automated real-time consignment status tracking and tools for exporters to advise the department on the status of required information.

The department's trade reform digital strategy has a range of initiatives that will modernise the department's IT systems for the benefit of exporters and departmental staff. Further user research and analysis will help the department focus on high value areas for improvement, including the provision of modern integrated platforms for efficient streamlined engagement with department services.

The department is already making improvements to export IT systems through the Taking Farmers to Market program which will include live animal exports.

## Recommendation 2

The department should streamline the notice of intention to export (NOI) assessment and decision-making process by:

- implementing a risk-based NOI assessment process to redirect its resources to higher risk consignments and provide faster decisions for lower risk consignments
- publishing updated policy guidelines that define thresholds that trigger the need for a variation to the NOI application to be submitted.

### Department's response

#### *Point 1: Agree*

The department has implemented a risk-based and streamlined process for assessing notices of intention (NOI) to export. Early data indicates decreases in assessment times and costs for exporters.

### ***Point 2: Agree in principle***

The department is consulting with stakeholders on a revised policy for variations to NOIs which could be considered minor in nature. The department will consider if there are opportunities to introduce threshold triggers that would not require a variation to the NOI as part of this process and any changes to legislation that may be needed to support this approach.

## **Recommendation 3**

The department should consider a single integrated application process to include notice of intention to export, export permits and health certificates.

### **Department's response**

#### ***Agree in principle***

The department will consider the recommendation as part of its live animal export roundtable projects and its agricultural trade reform program.

One of the roundtable projects is finding ways to streamline the administration of approved arrangements while maintaining effective regulation of the livestock trade. This project will explore the business process, resourcing and legislative opportunities for integrating the NOI, and export permit and health certificate application process.

The department's agriculture trade reform program will introduce modern and connected digital services to create a more streamlined and integrated export experience. Improvements are already being made to our IT systems with benefits being extended to live animal exports consistent with the trade reform program's vision. We will consider the inspector-general's recommendation as part of this program.

## **Recommendation 4**

The department should review the Performance management and compliance guidelines – approved arrangements for livestock exporters, including the livestock export consignment reports ratings, the way in which audits are utilised, and how this relates to performance levels, and the utility of performance levels.

### **Department's response**

#### ***Agree***

The department has already commenced a review of the livestock exporter performance management and compliance framework. Extensive stakeholder consultation with exporters and other industry participants has been completed to identify key themes related to compliance. Work is underway on a revised framework, which will consider how exporter performance and compliance information is recorded and managed over time, and how the department might implement a targeted and proportionate response model. This will include consideration of the utility of a rating system and how audits are best utilised within the broader live animal export assurance activities.

## Recommendation 5

The department should implement a risk-targeted multidisciplinary audit process that is conducted during the notice of intention to export application and export permit inspection process (consistent with the inspector-general's recommendation 4(d) of the review Monitoring and reporting during livestock export voyages, and Moss Review recommendation 7).

### Department's response

#### *Agree*

The implementation of this recommendation is in progress including development of a full consignment audit program. In addition, the department is currently looking at an improved integrated assurance framework for live animal exports and will consider the introduction of assurance activities consistent with this recommendation, such as random full document inspections during the notice of intention to export application and export permit process.

## Recommendation 6

The department should trial the use of body cameras for regional veterinary officers and auditors for use during inspections and onsite audits.

### Department's response

#### *Agree in principle*

The department agrees there are benefits in using video and photographs as part the inspection record and already encourages the use of cameras during inspections.

To expand the use of cameras to include the use of body cameras requires further investigation of the associated requirements and obligations. The department will investigate, the requirements and obligations required to conduct a trial of body cameras for regional veterinary officers and auditors for use during inspections and onsite audits.

## Recommendation 7

The department should continue to use its discretion in relation to the Fremantle model provided:

- that where a registered establishment is physically unable to fully comply with ASEL the occupier agrees to develop and submit a program of works that would enable the registered establishment to fully comply, and a schedule and time frame for implementation of those works
- if the works and the time frame are accepted by the department as being reasonably practicable, the department consider an enforceable undertaking to ensure that the works progress over the agreed time frame so that the exporters and registered establishments can be progressively brought into full compliance.

### Department's response

#### *Agree*

The department agrees that all exporters and registered establishments should be able to fully comply with ASEL requirements.

The department agrees to engage with livestock exporters and registered establishment operators to determine a reasonable time frame and program of works to enable registered establishments to fully comply with ASEL requirements.

## Appendix B

# Livestock management plans for air and sea

Livestock export management plans are required for specific export consignments by air or sea.

Management plan	Approval requirement	ASEL
Camelids by sea	Sourcing and exporting camelids by sea.	s1.3.1
Deer by sea	Sourcing and exporting deer by sea.	s1.5.1
Extended long-haul by sea	Exports of livestock that are expected to be 31 days or more, or that will travel via the Suez Canal, the Cape of Good Hope, the Panama Canal or Cape Horn.	s5.1.17
Heavy cattle or buffalo by sea	Export heavy buffalo/cattle with an individual liveweight of over 500 kg	s1.2.3 s1.4.3
Leaving registered establishment before vessel clearance	Leave a registered establishment before Australian Maritime Safety Authority, the master or biosecurity clearance.	sS3.1.2
Light cattle or buffalo by sea	Source buffalo/cattle with an individual liveweight of less than 200 kg (noting animals will need to be at least 200 kg at time of export).	s1.2.3 s1.4.2
Long horned livestock by sea	Buffalo with horns longer than the spread of the ears. Cattle with horns longer than 12 cm. Goats with horns longer than 15 cm and/or not blunt. Sheep with horns longer than one full curl.	s1.2.7 s1.4.8 s1.6.8 s1.7.7
Pregnant southern sourced Bos Taurus cattle by sea crossing the equator from May to October	Source and export Bos Taurus cattle sourced from any area of Australia south of latitude 26° south on voyages that cross the equator and depart between 1 May and 31 October (inclusive).	s1.4.3

Management plan	Approval requirement	ASEL
Treatment onto trucks for feeder cattle to Israel management plan	Treat livestock as they are being loaded onto trucks for transport from the registered establishment to the departure port.	NA
Camels over 300 kg by air	Source for export or export camels over 300 kg by air.	s6.4.8
Export of deer under 6 months of age	Source for export deer less than 6 months old by air.	s6.6.1
Heavy cattle or buffalo by air	Source for export or export cattle or buffalo by air with an individual liveweight of more than 650 kg.	s6.3.3 s6.5.2
Livestock exported in the last third of pregnancy by air	Export female breeder livestock by air that have exceeded the gestation length at the scheduled date of export as described in ASEL.	s6.2.4 s6.3.6 s6.4.4 s6.5.5 s6.6.7 s6.7.6 s6.9.5
Livestock that have recently given birth by air	Export livestock by air that have recently given birth (more than 5 days but less than 15 days of giving birth).	s6.1.18
Livestock with young at foot by air	Export livestock by air with young at foot.	s6.1.17
Long horned livestock by air	Source for export or export livestock by air with horns that do not meet ASEL requirements.	s6.3.7 s6.5.6 s6.7.7 s6.9.6
Miniature or light weight breed livestock by air	Source for export or export by air miniature breeds of livestock or other light weight breeds that do not meet minimum liveweight requirements.	s6.1.20
Llama by air	Source for export or export llama by air.	s6.8.1

## Appendix C

# Rejection criteria for all species by sea

Standard 1 of the Australian Standards for the Export of Livestock covers the standards that relate to the sourcing and preparation of livestock for export by sea.

Category	Rejection criteria
General requirements	<ul style="list-style-type: none"><li>■ Failure to meet importing country requirements including sex or breed if specified</li><li>■ Pregnancy status not confirmed as appropriate for export</li><li>■ Lactating animals/lactating animals with young at foot</li><li>■ Viral diseases such as scabby mouth or infectious bovine rhinotracheitis</li><li>■ Animals displaying clinical signs of infectious or contagious disease or external parasites</li><li>■ Animals showing signs of injury such as but not limited to fractures or swelling</li></ul>
Systemic conditions	<ul style="list-style-type: none"><li>■ Body condition score not appropriate for export (such as emaciated or over-fat)</li><li>■ Anorexia (inappetence or 'shy feeders')</li><li>■ Uncoordinated, collapsed, weak</li><li>■ Unwell, lethargic, dehydrated</li><li>■ Ill-thrift</li></ul>
Gastrointestinal system	<ul style="list-style-type: none"><li>■ Dysentery or profuse diarrhoea</li><li>■ Bloat</li></ul>
Musculoskeletal system	<ul style="list-style-type: none"><li>■ Abnormal gait or lameness of any kind</li><li>■ Abnormal soft tissue or bony swellings</li></ul>
Nervous system	<ul style="list-style-type: none"><li>■ Nervous symptoms such as head tilt, circling, incoordination</li><li>■ Abnormal or aggressive behaviour/intractable or violent</li></ul>



Category	Rejection criteria
External/skin	<ul style="list-style-type: none"> <li>■ Generalised papillomatosis or generalised ringworm or dermatophilosis</li> <li>■ Generalised and extensive buffalo fly lesions</li> <li>■ Generalised skin disease or infection</li> <li>■ External skin cancer</li> <li>■ Lacerations that penetrate the full thickness of the dermis or are likely to affect the health or welfare of the animal</li> <li>■ Discharging wounds or abscesses</li> <li>■ Cutaneous myiasis (flystrike)</li> <li>■ Ballanitis (pizzle rot in sheep)</li> <li>■ Blood/abnormal discharge from reproductive tract (vulva/prepuce)</li> <li>■ Visible external parasites</li> </ul>
Head	<ul style="list-style-type: none"> <li>■ Blindness in 1 or both eyes</li> <li>■ Cancer eye</li> <li>■ Keratoconjunctivitis (pink eye)</li> <li>■ Excessive salivation</li> <li>■ Nasal discharge consistent with signs of a contagious or infectious disease</li> <li>■ Coughing consistent with signs of a contagious or infectious disease</li> <li>■ Respiratory distress or difficulty breathing</li> <li>■ Sharp horns</li> <li>■ Horns causing damage to the head or eyes</li> <li>■ Bleeding horn stumps or broken antlers</li> <li>■ Horns longer than appropriate for export</li> <li>■ Scabby mouth</li> </ul>
Other	<ul style="list-style-type: none"> <li>■ Groups of animals with unusual mortalities</li> <li>■ Disparities in sex, size, weight or age that could cause an issue with the health or welfare of the animals (redraft animals in this case)</li> </ul>

## Appendix D

# Management of animal rejects in ASEL

There are a number of requirements relating to the management of animal rejects in the Australian Standards for the Export of Livestock.

Standard	Description
s1.1—General and all species requirements	<ul style="list-style-type: none"><li>■ Livestock must not be sourced for export or exported unless dehorning and tipping wounds are fully healed prior to any transport.</li><li>■ Livestock must not be sourced for export or exported unless they have been inspected by a competent stock handler and do not show signs consistent with the rejection criteria specified in Table 1, or any other condition that could cause the animal's health or welfare to decline during export preparation or transport. Livestock that become sick, injured or show signs consistent with the rejection criteria at any stage of export preparation must be removed from the consignment, and arrangements must be made for their prompt and humane handling, care, treatment, euthanasia and/or disposal, in compliance with all relevant and applicable legislation.</li><li>■ Rejection criteria for all species by sea (Appendix C).</li></ul>
s3.1.15—Management of livestock in registered premises	Livestock must be individually inspected at unloading, and inspected at least daily, to determine whether they are suitable for preparation for export. Any livestock identified as being distressed, injured or otherwise unsuitable for export must be rejected from the consignment, marked by a semi-permanent or permanent method and isolated from the rest of the consignment. Any other condition that could be defined as an infectious or contagious disease, or would mean that the animal's health or welfare could decline or that the animal would suffer distress during transport, also requires the animal's rejection from export preparation.

Standard	Description
s3.8.1—Monitoring and reporting requirements	<ul style="list-style-type: none"> <li>■ daily inspections by competent stock handlers of livestock health, welfare and appropriateness for export</li> <li>■ any mortality, sickness, injury or other sign consistent with the rejection criteria found, and actions taken to identify and remove any rejected livestock from the consignment, including handling, care, treatment, euthanasia and/or disposal</li> </ul>
s5.1.6—Loading and onboard management requirements	<p>To ensure that only fit and healthy livestock are loaded onto the vessel:</p> <ul style="list-style-type: none"> <li>■ the exporter must arrange for an accredited stockperson, an AAV and/or a competent stock handler to inspect the livestock for health and welfare and fitness to travel, immediately before they are loaded onto the vessel; and</li> <li>■ only livestock that are healthy and fit to travel including not showing signs consistent with the rejection criteria can be loaded; and</li> <li>■ any livestock rejected for export must be distinctively identified, segregated from the consignment and treated if necessary. Humane and effective arrangements must be made for their removal from the port; and</li> <li>■ if euthanasia is necessary, it must be carried out promptly and in a humane manner that causes prompt loss of consciousness and then rapid death by a method approved under the national animal welfare standards and guidelines or model codes of practice; and</li> <li>■ dead livestock must be removed from the port, and carcasses must be disposed of in compliance with all relevant and applicable legislation.</li> </ul>

# Glossary

Term	Definition
animal welfare	The ability of an animal to cope with the conditions in which it lives and dies as described in the World Organisation for Animal Health (OIE) Terrestrial Animal Health Code.
approved arrangement (AA)	An agreement between the department and an exporter which sets out the operations to manage the preparation and certification of livestock to be exported from Australia.
approved export program (AEP)	A program of activities that an exporter uses to direct an accredited veterinarian to undertake to ensure the health and welfare of the livestock during export activities.
approved premises	A place approved by the department for the pre-export quarantine or isolation of a consignment of livestock for export by air.
Australian Government accredited veterinarian (AAV)	A veterinarian who is accredited by the department to carry out export operations in approved export programs. Also referred to as an accredited veterinarian.
Australian Standards for the Export of Livestock Version 3.1 (ASEL)	The minimum animal health and welfare requirements the Australian Government expects the livestock export industry to meet throughout the supply chain from sourcing to disembarkation overseas.
authorised officer	An Australian Government official authorised to perform functions in accordance with Australian livestock export legislation.
consignment	A group of livestock that are under export preparation by one exporter and are destined for export, or have been exported, from a single seaport or airport.
consignment specific export plan (CSEP)	A plan that provides details of a particular consignment of livestock for export and needs to be prepared for each consignment.
export permit	A permit issued by the department to enable the export of live animals from Australia.

Term	Definition
health certificate	A certificate which states that the livestock meet the health requirements specified by the importing country. Also referred to as a certificate of health and a government certificate.
importing country requirements	Conditions required by an importing country including protocols, import permits, dispensations, or other approved equivalency agreements relating to the health requirements and certification of exported livestock.
livestock	Cattle, sheep, goats, deer, buffalo and camelids, including the young of these animals.
livestock export consignment report (LECR)	A report recording any issues and potential or actual noncompliance identified during livestock inspection and document verification.
management plan	A plan that sets out how an exporter will manage the sourcing, preparation and transport (land and sea/air) of a particular type of consignment or class of livestock.
notice of intention (NOI)	An application made to the department by an exporter to export livestock Australia.
regional veterinary officer (RVO)	A departmental veterinary officer authorised to inspect livestock for export and issue export permits and health certificates.
registered establishment	Premises approved by the department to prepare livestock for export by sea.
standard export plan (SEP)	A plan that sets out how an exporter will meet all relevant Australian Government and state and territory legislation, standards and importing country requirements for the market, species, class and mode of transport for which it intends to export.
the department	The Department of Agriculture, Water and the Environment (and its predecessors).
Tracking Animal Certification for Export (TRACE)	An online departmental system that manages the application and approval processes for consignments of all live animals exported from Australia.

## References

- ABARES 2019, [Agricultural commodity statistics 2019](#), Australian Bureau of Agricultural and Resource Economics and Sciences, Canberra. [doi.org/10.25814/5de0912755baa](https://doi.org/10.25814/5de0912755baa)
- ABS 2014, [National Statistical Service, Australian Bureau of Statistics annual report 2013–14](#), Canberra, accessed 26 August 2021.
- DAFF 2012, [Review of the Inspection Regime Prior to Export of Livestock from Fremantle Port](#), Department of Agriculture, Fisheries and Forestry, Canberra.
- DAWR, 2016, [Management and removal of rejects](#), Export Advisory Notice 2016–16, Department of Agriculture and Water Resources, Canberra, June.
- DAWE 2020a, [Publication of the Australian Standards for the Export of Livestock 3.0, Export Advisory Notice 2020–08](#), Department of Agriculture, Water and the Environment, Canberra, April.
- DAWE 2020b, [Modernising the meat export regulatory system](#), Department of Agriculture, Water and the Environment, Canberra, accessed 14 April 2021.
- DAWE 2021a, [Exports to the Kingdom of Saudi Arabia, Export Advisory Notice 2021–05](#), Department of Agriculture, Water and the Environment, Canberra, April.
- DAWE 2021b, [Approved arrangement guidelines for the export of livestock](#), Department of Agriculture, Water and the Environment, Canberra, accessed 15 April 2021.
- DAWE 2021c, [Core documents by category](#), Department of Agriculture, Water and the Environment, Canberra, accessed 15 July 2021.
- DAWE 2021d, [Establishments registered by the department](#), Department of Agriculture, Water and the Environment, Canberra, accessed 30 March 2021.
- Farmer 2011, [Independent Review of Australia's Livestock Export Trade](#), Department of Agriculture, Fisheries and Forestry, Canberra.
- IGLAE 2020a, [Implementation of Moss Review recommendations](#), Inspector-General of Live Animal Exports, Canberra.
- IGLAE 2020b, [Monitoring and reporting during livestock export voyages](#), Inspector-General of Live Animal Exports, Canberra.
- IGLAE 2021, [Review of the Exporter Supply Chain Assurance System](#), Inspector-General of Live Animal Exports, Canberra.
- McCarthy, M 2018, [Independent review of conditions for the export of sheep to the Middle East during the northern hemisphere summer](#), report to the Minister for Agriculture and Water Resources, Canberra.

