



Australian Government

Inspector-General of Live Animal Exports

Monitoring and reporting during livestock export voyages

Review report no. 2019–20/01



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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
Web iglae.gov.au

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Ms Stacey McIntosh and Dr Hyo Ryung Lee assisted the Inspector-General in this review.

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Review process

Objectives

The objectives of this review were to examine:

- the effectiveness and efficiency of the monitoring and reporting required by the Department of Agriculture, Water and the Environment in providing assurance of compliance with the *Australian Meat and Live-stock Industry Act 1997* and the *Export Control Act 1982*
- the extent to which monitoring and reporting contributes to managing risks to animal welfare outcomes on live export voyages
- what improvements should be made to the current arrangements.

Scope

The scope of this review covered the department's requirements and activities for monitoring and reporting during voyages and considered:

- monitoring and reporting requirements from the time the loading of a vessel is complete to when the last animal has been unloaded from the vessel at overseas destinations
- the extent to which monitoring and reporting provides assurance of compliance with the legislation, standards, policies and procedures for the export of livestock
- the extent to which monitoring and reporting requirements support or contribute to the mitigation and management of risks to animal welfare during voyages
- the department's processes for engagement and consultation with industry, other Australian Government agencies, and stakeholders such as port authorities and vessel operators, in managing animal welfare issues during voyages
- the roles and responsibilities of persons directly responsible for managing and reporting of animal welfare issues during a voyage, including
 - Independent Observers
 - Australian Government accredited veterinarians
 - accredited stockpersons
 - vessel masters.
- examining the efficacy, timeliness and transparency in the department's management and use of reports, including the extent to which they contribute to strategic risk-based regulatory practice and informing improvements in the management of animal welfare during voyages
- the department's management and use of reports to increase community and industry confidence in the effectiveness of its regulation in achieving the objectives of the legislation
- the cost effectiveness to government and industry of monitoring and reporting requirements.

Out of scope

This review did not examine:

- the investigation process of reportable incidents
- the role of approved arrangements in regulating the loading and pre-export preparation of livestock and vessels
- livestock exported by air
- vessel preparation or onboard waste disposal
- Exporter Supply Chain Assurance System reporting requirements.

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
 - obtain initial background information about onboard monitoring and reporting
 - allow all parties to discuss, brainstorm and seek clarification from the Inspector-General about the proposed review process
- conducted in-person meetings, phone meetings and interviews with key stakeholders
- invited submissions from stakeholders
- discussed preliminary data or information requirements with relevant departmental officers and requested data or information
- conducted a desktop audit of relevant department data and documentation, including instructional material, policies and communications material
- visited Brisbane, Darwin, Melbourne and Perth to discuss, observe and verify the department's procedures and operations
- conducted an exit meeting with the department's executives that
 - provided an overview of initial review findings
 - outlined the process of release and response to the draft report.

A draft review report with key findings and recommendations was presented to the department for factual consideration. The department's Secretary provided a response to my recommendations which is included in this report. Further, I provided a final report to the Agriculture Minister before publishing on the Inspector-General of Live Animal Exports' website.

Summary

During the Inspector-General of Live Animal Exports' initial consultations with stakeholders, concerns about monitoring and reporting on voyages were consistently raised. As a result, this review was made a priority and is the first to take place. Given that it is the first review, and that the Inspector-General undertook extensive consultation to develop the work plan and undertake this review, it is appropriate to make some general observations about the department's regulatory practice.

The department has made important progress in its regulatory practice and capability improvement in response to the Moss Review. However, there is significant opportunity for the department to further improve. This improvement is predicated on a shift of the regulatory model to a more integrated and outcome-focused approach. Understanding risks to objectives and then using data, intelligence and analytics to target regulatory work is critical. Increasing the efficiency of administration for straightforward decision-making, and reducing the amount of effort on general regulatory activity, can free resources for this targeted work. It will also provide opportunities to deliver more timely decisions and reduce the cost burden for industry.

The Inspector-General has identified 4 initial focus areas for improvement:

- 1) sanctions—the department needs to use the sanctions it has available more often, more effectively and more resolutely
- 2) transparency—the department should adopt an 'if not, why not' approach to the publication and release of regulatory material, particularly decisions and their reasons, investigations and their conclusions, and reports
- 3) preventing and mitigating harm—the department should seek to target its regulatory efforts to the extent possible on preventing and mitigating the risk of harm
- 4) clarity of purpose—ensuring that specific regulatory decisions are not clouded by trade facilitation considerations. Firm and fair regulation is critical to community trust and confidence in industry.

These focus areas, if pursued, should deliver:

- increased effectiveness in preventing and mitigating the risk of harm to animal health and welfare through improved exporter performance
- higher efficiency, and hence lower costs to industry, through greater focus on risk prevention and outcomes
- increased community confidence in the department as a regulator and in the industry in its commitment to animal health and welfare.

The department and industry have improved the level of risk management for voyages through a range of pre-voyage risk mitigation actions. This review focused on monitoring and reporting during the livestock export voyage itself, examining its effectiveness and efficiency in assuring compliance, and the extent to which it contributes to managing risks to animal health and welfare. The review was satisfied that there was general support for, and utility in, the overall

framework of daily and end-of-voyage reporting. The following issues were identified by the review.

Data quality, standards and analysis

Whatever purpose monitored data is used for, its quality is important. The department has made progress on quantitative and qualitative standards through the review of the Australian Standards for the Export of Livestock (ASEL) and other work. The collection of quantitative data needs to be to specified standards. The level of subjectivity in the collection of qualitative data, particularly animal welfare indicators, needs to be reduced through increased guidance and training.

Significant opportunities exist for the department to require automated data collection and data logging. Automated collection of the key quantitative parameters of dry and wet bulb temperatures, and the qualitative observation data of decks, pens and animal welfare conditions through CCTV technology, should be put in place. This will increase effectiveness by reducing human error and omission, support onboard response to risks with real-time data, improve reporting capability and allow onboard effort to focus on managing animal health and welfare. It will also provide verifiable data logs for regulatory assurance, increasing effectiveness and supporting more efficient regulatory practice.

Improved data quality is essential to ensure that the potential value of the data can be exploited through analysis. The department has increased its capability in this by establishing a Technical Analysis Team within the Live Animal Exports Division, with both statistical and epidemiological expertise. To support continuous improvement in both animal health and welfare standards, and in advanced regulatory practice focused on preventing the risk of harm, this capability needs further investment and development.

Livestock exporters

As with stakeholders in any industry, livestock exporters have a range of different practices and behaviours. In 2017, the department put in place approved arrangements for livestock exporters to provide an outcomes-based framework for exporters to demonstrate that they had the requisite business systems and processes to meet legislative requirements and manage risk. The department has taken a more prescriptive approach to approved arrangements in response to the Moss Review and changes to their authorising environment. This has resulted in decreased efficiency for both regulatory administration and for industry.

The department has a significant opportunity to reframe approved arrangements to ensure that livestock exporters are clearly responsible and accountable for having business systems and processes that assure compliance and effective risk management. This includes the risk of poor animal health and welfare outcomes. A critical part of this reframing is to ensure that operational execution by livestock exporters is enforceable and to actively target the detection and sanctioning of poor practice. This approach will reward good business practice through the pursuit of a level playing field.

Independent Observers

The rapid implementation of the Independent Observer program exceeded the department's capability to develop standardised reporting and publication systems and processes. The rapid

implementation also meant that Independent Observers could not be deployed on every voyage and summary reports were limited to specific vessels. The department has made improvements to the training and reporting systems that support the program and has now adjusted the program to a risk-based deployment of Independent Observers. The Inspector-General generally supports risk-based approaches provided the other elements of monitoring and reporting on voyages are in place, specifically:

- improved data quality
- standards and analysis
- automation
- improved targeting of regulatory monitoring through integrated audit and inspection projects.

The Inspector-General also recommends increased transparency through service-level commitments for summary reports to be published on the department's website, including where investigation and action is required.

Accredited stockpersons

Stockpersons are widely acknowledged as a critical part of the onboard management of livestock. Accordingly, supporting stockpersons through guidance and training updates is important to industry and the department. The opportunity for stockpersons to share lessons learned with each other and the department should be pursued.

Australian Government accredited veterinarians

Livestock exporters are undertaking the business of live animal export and should be responsible and accountable for the outcomes of the voyage, including the performance of their employees and contractors. Australian Government accredited veterinarians (AAVs) on voyages provide a critical professional service to exporters for the health and welfare of their livestock. In addition, AAVs have their own regulatory and professional obligations.

The department needs to undertake regulatory monitoring of AAVs to detect and sanction non-compliance, as it does for any regulated party. This would include analysis of reports provided by AAVs. The department also needs to encourage voluntary compliance through improved guidance, support and engagement with AAVs. This will have the additional benefit of providing the department with access to the extensive knowledge and experience in managing livestock health and welfare on voyages that AAVs can provide.

Vessel masters

Vessel masters have an overriding obligation for the safety of the vessel and all those onboard, as well as for the livestock. The reporting that they undertake, and the monitoring that is available to them during a voyage, is anticipated to be more effective and efficient with increased automation and standardisation. The primary regulator for vessels is the Australian Maritime Safety Authority (AMSA). The department is encouraged to continue to collaborate with AMSA on automated monitoring, vessel standards (and individual vessel profiles) and proactive regulatory projects.

Recommendations

Recommendation 1

- 1) That the department develop a data quality and management strategy that:
 - a) adopts the Australian Government's quantitative data standards
 - b) includes actions to develop detailed guidance and training resources for all qualitative data to reduce subjectivity
 - c) uses co-design to develop electronic report formats that increase standardisation and support data upload for analysis
 - d) supports clear, accurate and efficient reporting.

Department's response

Support in principle

The department recently established a Technical Analysis Team in the Animal Welfare Branch. It will continue to explore ways to standardise data and reporting to inform regulatory decisions, including developing guidance and training.

Data collection, co-design of reporting format and qualitative data standards implementation will be subject to whole of department ICT system solutions and budgetary constraints.

Recommendation 2

- 2) That the department work with the Australian Maritime Safety Authority to require all vessels used in the live export trade to install automated:
 - a) CCTV cameras to record representative pens on all decks and any pens that have been identified as problematic
 - b) wet and dry bulb temperature monitors at representative locations on each deck and on the bridge
 - c) data loggers that can provide monitored data to those onboard in real time and that retain data records in a verifiable form for compliance purposes.

Department's response

Support in principle

The department agrees with the benefits of utilising automated solutions to guide standards development and to support regulatory decisions. Data loggers have been mandated on sheep voyages during the northern summer shoulder periods.

It will continue to work with the Australian Maritime Safety Authority to explore opportunities to, where possible, implement automated approaches to data and information collection.

Recommendation 3

- 3) That the department increase the resourcing and capability of the Technical Analysis Team in both statistical analytical expertise and epidemiological expertise. This analytical

capability should include expertise in identifying other areas of risk such as participant behaviour, drivers and asset performance (for example, vessels, decks and pens).

Department's response

Support in principle

The department recognises the value of the Technical Analysis Team and the need to upskill staff across the Division in digital literacy and invest in epidemiological expertise. The development of these capabilities has been a focus since the Moss Review.

The department agrees with using data to support evidence-based regulatory decisions. Subject to resource constraints, the department will continue to explore how it can invest in its data analysis and epidemiological capabilities.

Recommendation 4

- 4) That the department reframe approved arrangements for exporters to:
 - a) deliver the benefits of streamlined documentation and approval processes
 - b) incorporate characteristics and indicators of dynamic risk management as a requirement of exporters operating under their approved arrangements
 - c) ensure that demonstrating dynamic risk management by an exporter is an enforceable requirement
 - d) design and undertake unannounced and targeted regulatory projects aimed at detecting poor dynamic risk management.

Department's response

Support in principle

The department supports the need to reframe approved arrangements. In 2020, the department plans to commence a review of Approved Arrangements.

New powers will be available to the department if the Export Control Bill 2019 is passed. Work to implement this will develop guidance to whole of department compliance approaches, which may also influence how Approved Arrangements are regulated.

The department is continuing to develop approaches to verification audits, to be implemented later this years, and will take into account the need to detect poor dynamic risk management as part of this project.

Recommendation 5

- 5) That Independent Observers be deployed as part of a risk-based compliance monitoring program that includes:
 - a) targeting of industry participants based on analysis, intelligence and the nature of voyages (with an element of random targeting)
 - b) a proportion of Independent Observer deployment occur as part of integrated audit and inspection projects.

Department's response

Support

In October 2019, the department revised its approach to the deployment of independent observers (IO) so that it no longer requires IOs on all low-risk short-haul voyages.

In November 2019, the department released a consultation paper that discussed how it could move to a more sophisticated approach for the deployment of IOs.

The department is reviewing submissions to the consultation paper to guide an updated IO deployment policy as well as evaluate the change in policy since October 2019.

The Technical Analysis Team within the Live Animal Export Division currently performs analysis of voyage data to support risk-based regulatory activities.

Greater resourcing and data capability development is required (as per recommendation 3), to enhance analysis and targeting of risk areas.

The Animal Welfare Branch is also introducing system verification activities across the livestock export supply chain. Random auditing of consignments will feature in this work.

The department will consider how Independent Observer deployment can also be incorporated into verification activities.

Recommendation 6

- 6) That Independent Observer summary reports be published within a service-level commitment period after the conclusion of a voyage. Any matters under further investigation should be noted. Details of matters under investigation may be excluded, as appropriate, until the department's course of action is determined. Once this is determined, the published report should be updated to explain the issue and the department's response.

Department's response

Support

The department will review its procedures for processing Independent Observer Reports with a view to establishing a timeframe within which summary reports will be published

Recommendation 7

- 7) That the department consider whether cost recovery of the Independent Observer program should be incorporated into the general cost of regulation.

Department's response

Support

The department will explore cost recovery considerations for the Independent Observer Program in the broader context of current whole of department cost recovery activities.

A proposed approach to cost recovery of the whole program, including a division between levies and direct charging, was initially discussed with industry on 26 February 2020

Recommendation 8

- 8) That the department work with LiveCorp and industry to update training for stockpersons, particularly in relation to monitoring and reporting. The department should consider the utility of establishing a stockperson network.

Department's response

Support

The department will work with LiveCorp and industry when LiveCorp updates this training.

This will include support to review and update the LiveCorp Shipboard Stockperson Training Course and industry education sessions (in the form of teleconferences, workshops and/or webinars) on the Australian Standards for the Export of Livestock (ASEL) version 3, with a focus on monitoring and reporting requirements.

The department will liaise with industry to investigate establishing a stockperson network.

Recommendation 9

- 9) That Australian Government accredited veterinarian training, monitoring and reporting obligations be updated and clarified with improved guidance, support material and advice.

Department's response

Support

In August 2019, the department began implementing debriefs with ship board AAVs following each voyage.

The department is establishing regular meetings/teleconferences with a highly engaged working group of AAVs.

The department will also hold an AAV workshop in Adelaide in March 2020. The workshop will discuss training, monitoring and reporting obligations.

Recommendation 10

- 10) That Australian Government accredited veterinarians are accessed as a professional group to contribute to industry co-design of relevant monitoring and reporting standards and formats.

Department's response

Support

Regular engagement with AAVs via the AAV Working Group will provide a forum to access AAV expertise when designing monitoring and reporting standards and formats.

Recommendation 11

- 11) That the department support Australian Government accredited veterinarian forums, in addition to debriefing individual veterinarians after voyages, that allow the exchange of

information, knowledge and experience of effective approaches to managing onboard risks between veterinarians and the department.

Department's response

Support in principle

Given AAVs are dispersed across Australia, the department will work with the recently established AAV Working Group to confirm the best format for a forum to exchange information.

Recommendation 12

- 12) That the department develop a risk-based compliance monitoring program for Australian Government accredited veterinarians, including a firm approach to escalating sanctions, to support good performance and a level playing field.

Department's response

Support in principle

The department is developing its conflict of interest policy for AAVs which will include an audit schedule.



Ross Carter

Inspector-General of Live Animal Exports

2 March 2020



1 Background

Australia has been exporting livestock around the world for over 150 years, with sheep exports from Western Australia taking place as early as 1845.

In 1926 the Navigation (Deck Cargo and Livestock) Regulations 1926 were introduced to regulate the export of livestock. This prescribed standards for the carrying of livestock, including pen and stall sizes and the provision of food and ventilation.

In 1935 the Quarantine (Animals) Regulations 1935 were introduced, requiring animals to be examined by a government-approved veterinary surgeon to ensure the animals were healthy and met the quarantine requirements of the importing country. Since that time, the Australian Government has continued to reform and update the legislative framework for the export of animals culminating in the current legislation—the *Export Control Act 1982* and the *Australian Meat and Live-stock Industry Act 1997*. The Minister for Agriculture recently introduced the Export Control Bill 2019 to parliament—an overarching reform to modernise the legislative framework.

The Department of Agriculture, Water and the Environment is responsible for the regulation, operational policy design and standards-setting process for the export of livestock. State and territory governments also have responsibility for ensuring that the animal health and welfare requirements of their relevant legislation are met within their respective jurisdictions.

The export of livestock has expanded significantly over the last 30 years and is important to the Australian economy, particularly in rural and remote areas. In 2018–19 livestock exports was worth over \$1.4 billion (ABARES 2019). The health and welfare of exported livestock is dependent on exporters and government. The department acknowledges this on their website stating that:

The welfare of animals and the livelihood of Australians working in rural and regional communities are important considerations in the export of live animals. The Australian Government has a responsibility to the animal producers, exporters and service industries who rely on the export of livestock for their income; the exported animals that are dependent on exporters and government to ensure their welfare; and the broader Australian community, which expects government to enforce standards that reflect their values (Department of Agriculture, Water and the Environment 2020).

Since 2003 several major animal welfare incidents have occurred on voyages. These incidents have triggered independent reviews into the livestock export industry and the regulator:

- December 2003—Livestock export review (Keniry Review)
- August 2011—Independent review of Australia’s livestock export trade (Farmer Review)
- May 2018—Independent review of conditions for the export of sheep to the Middle East during the northern hemisphere summer (McCarthy Review)

- September 2018—Review of regulatory capability and culture of the Department of Agriculture and Water Resources in the regulation of livestock exports (Moss Review).

These reviews have all identified issues and concerns with monitoring and reporting of livestock export voyages. The Keniry Review observed that:

... the Australian Government is responsible for protecting the broader interests of the Australian community in the export process by setting clear standards for the export of livestock, administering them firmly and consistently, and for ensuring governance and reporting arrangements in relation to animal welfare during export are transparent (Keniry 2003).

The McCarthy Review, while focused on the export of sheep to the Middle East during the Northern Hemisphere summer, noted:

... in general, the existing reporting system is probably outdated and new technology is available that may revolutionise the reporting process, particularly with the advent of automated environmental monitoring. Digital data capture using a hand held device has been trialled within the industry and has shown promise (McCarthy 2018).

The Moss Review also concluded that:

... the reporting framework in relation to animal health and welfare on board export vessels has not been fully effective. In addition, the department only has limited capacity to analyse and assess the reporting of animal welfare. The department needs to have arrangements to verify the information it receives about the health and welfare of livestock being exported. Currently the placement of Independent Observers on board vessels is helping to meet that need (Moss 2018).

The department's statement to a Senate Estimates hearing on 24 May 2018 noted 'insufficient means of assuring itself of exporter compliance with regulatory obligations while livestock were on the water' as a shortcoming in its regulatory approach.

During the Inspector-General of Live Animal Exports' initial consultations with stakeholders, the effectiveness, efficiency, timeliness, independence and transparency of monitoring and reporting on voyages was consistently raised. Accordingly, in developing the initial work plan, this review was identified as a priority and is the first to take place.

Monitoring and reporting requirements are important regulatory tools available to the department to ensure industry compliance with the requirements of the legislation for the export of livestock, primarily the *Australian Meat and Live-stock Industry Act 1997* (AMLI Act) and the *Export Control Act 1982*.

A recommendation from the Moss Review was 'that an independent external entity, known as the Inspector-General of Live Animal Exports, oversee the department in its role as the regulator of live animal exports'. The government supported this recommendation with the *Inspector-General of Live Animal Exports Act 2019* coming into effect on 3 October 2019. The Act establishes the objectives that guide the work of the Inspector-General of Live Animal Exports.

The objects of this Act are:

- a) to promote continual improvements in the regulatory practice, performance and culture of the department in its role as the regulator of Australia's livestock exports
- b) to provide an additional layer of accountability and assurance over the regulation of Australia's livestock exports
- c) to ensure that livestock export officials, in performing functions and exercising powers, consider the welfare of animals in Australia's livestock exports.

To pursue these objectives it is important, in the first instance, to describe the principles and concepts that are recognised as good regulatory practice, and discuss them in the context of the regulation of livestock exports. The concepts and principles can be applied in a number of ways. It is important to continue to discuss regulatory practice in relation to live animal exports, as it evolves, with all stakeholders, the department and the Minister.

2 Best practice regulation

Best practice regulation may be described as a dynamic combination of regulatory practice concepts tailored to the operating context.

Key concepts of regulatory practice include:

- risk-based regulation
- responsive regulation
- regulatory craftsmanship.

Risk-based regulation

The concept of risk-based regulation is interpreted and applied in a range of ways. The most common application is to use risk to guide priorities in administrative processes and compliance activity. This is an essential and commonsense approach to allocating finite resources, and is an approach adopted by the department.

However, a best practice approach to risk-based regulation should also incorporate an approach to risk where information, intelligence and data is used to:

- identify risks to the objectives of the regulator
- determine the significance of the risk (usually based on a probability or consequence basis)
- target a proportion of the regulators efforts to prevent or mitigate the most important risks (see [Regulatory craftsmanship](#)).

These efforts are usually distinguished from a risk-based approach to administration and compliance activity through their delivery on a project basis, informed by ongoing data analysis.

Risk-based regulation should be evident in a best practice regulator. This is about aligning the effort of the regulator with the ultimate outcome being sought. It is likely to assist those being regulated to also align their effort on this outcome (Sparrow 2000, 2009; Black & Baldwin 2010).

Responsive regulation

The concept of responsive regulation overlaps with that of risk-based regulation as it incorporates the analyses of problems, advocates listening to those being regulated and adapts the response to a problem in order to fix it.

Proportionate response is also a widely adopted concept of responsive regulation. Proportionate response is where the level of regulatory action taken is proportionate to the particular case or circumstance necessary to achieve compliance (Ayres & Braithwaite 1992, Ivec et al. 2015). The department outlines its approach to responsive regulation in its internal Regulatory practice statement consultation draft (see [Appendix C](#)).

Regulatory craftsmanship

Regulatory craftsmanship builds on the concepts of risk-based regulation but in a framework that focuses on solving problems and preventing harm. That is, where a regulator uses legal and administrative tools to solve the problem, control the risk, or prevent the harm (see [Risk-based regulation](#)) (Sparrow 2000). A regulatory craftsmanship approach is an important part of responding to the Moss Review recommendation ‘that the department ... adopt a dynamic forward looking posture to its regulatory responsibilities’ (Moss 2018, recommendation 5).

The department has implemented a range of approaches that seek to target resources on a risk basis and has outlined a number of actions in response to this recommendation (Department of Agriculture 2019e). The department has also put in place approaches that can be described as regulatory craftsmanship, such as the approved arrangements framework.

Live animal exports framework

Parliament regulates through legislation. Regulation operates in light of the policies of the government of the day, the practices and performance of those who are subject to it, and the views and expectations of the wide range of interested stakeholders.

The Productivity Commission's inquiry report on the [Regulation of Australian Agriculture](#) noted that animal welfare regulation in Australia had unclear objectives. The primary cause identified by the commission was the limited understanding and agreement about community values, which contributed to conflicts in the development of animal standards and guidelines.

Standards and guidelines are important to further clarify objectives. However, the difficulty in determining these standards does not preclude a continuous improvement model. A continuous improvement model should accommodate increased research and scientific evidence of what constitutes animal welfare, and community expectations of what constitutes acceptable animal welfare. Where it is difficult to specify clear outcomes, regulation often includes increased prescription in an effort to control risk factors (see [Data quality, standards and analysis](#)).

The department's key objectives for the regulation of livestock exports includes ensuring:

- support for the long-term sustainability of the live export trade
- animal welfare is at the centre of export activities
- exporters adhere to World Organisation for Animal Health (OIE) welfare standards
- importing country requirements are met.

The department undertakes its policy and regulatory roles in this context and has reflected this in a range of policy and governance documents. The department's governance principles include:

Minimum effective regulation—ensure rules and processes are designed for the ‘normal’ or ‘average’ user, not over-engineered to target small pockets of non-compliance (Department of Agriculture 2020).

This principle may not clearly guide regulatory staff on a best practice regulatory approach. Best practice regulation supports voluntary compliance. For the ‘normal’ or ‘average’ user, who we can assume would willingly comply with requirements, this principle does align with best

regulatory practice as rules and processes should be easy to understand, comply with, and navigate. This should be less resource-intensive for both the user and the department and is the obvious intent of the principle.

However, 'small pockets' of non-compliance are exactly the places that warrant specific targeting (though not by over-engineering the rules and processes for the many who will voluntarily comply) because that is where the risk to the welfare of animals, to trade, and the risk of loss of community trust lie. There is potential for this element of the principle to be misinterpreted, and the department should consider clarifying it.

The department's internal Regulatory practice statement consultation draft broadly describes 6 regulatory systems that the department is responsible for and sets an objective for each system. The objective for livestock exports is:

Certifying goods, including livestock, for export that meet Australian export and importing country requirements (Department of Agriculture 2019d).

The practice statement 'Understand regulatory risks' identifies the risk of harm specific to live animal exports (Department of Agriculture 2019d):

We identify and analyse risks to our regulatory objectives based on evidence and identify ways in which harm may occur ...

... the poor welfare of our exported live animals ...

In the [Compliance statement for export of livestock](#), the department adds to this high level framework:

The Australian Government requires the department to exercise the necessary powers, regulatory capabilities and investigative capacity to ensure that animal welfare standards are met and export markets remain open (Department of Agriculture 2019a).

For livestock exports, the parliament, government and the department have framed objectives against which the department's regulatory efforts can be aligned. These statements of policy, principle and objective provide important guidance for departmental officers undertaking their regulatory tasks. Accordingly, they need to be refined and clearly communicated and discussed within the department to support and embed 'a cultural shift in its role as a regulator' (Moss 2018, recommendation 21).

The legislation for regulating livestock exports adds to the policy and administrative framework by providing the legal basis for how the department makes decisions and takes actions aimed at achieving policy, objectives and regulatory outcomes.

People seeking to undertake the export of livestock require an export licence under the *Australian Meat and Live-stock Industry Act 1997* (AMLI Act). Applicants need to satisfy the department that 'the granting of the licence to the applicant would not, for any other reason, be contrary to the interests of the industry (AMLI Act s12 (1)(e)).'

The reputational risk to the industry, and community confidence and trust in its regulation, are directly impacted by animal welfare outcomes. This means that those wishing to apply for an

export licence should be able to demonstrate that they can achieve good animal welfare outcomes. If they cannot, then it may be open to the department to conclude that their application is contrary to the interests of the industry.

The Australian Meat and Live-stock Industry (Export Licensing) Regulations 1998 (AMLI Reg) provide more detailed considerations that can help to focus regulatory practice on an outcomes and risk-based approach. For example:

- Livestock export licence applicants need to have an approved arrangement in place that covers each step of the preparation of the livestock and will ensure compliance with the Australian Standards for the Export of Livestock (ASEL) and the conditions of their export licence. In some circumstances an approved arrangement is not required, but an applicant must provide an operations and governance manual that includes how the business operations will comply with ASEL and risk management (AMLI Reg 14(4)).
- For a livestock export licence, the Secretary must have regard to a range of matters (AMLI Reg 16(j)) including whether the applicant has demonstrated an ability to comply with ASEL.

The Export Control (Animals) Order 2004 specifies that the Secretary must consider whether a Notice of Intention application demonstrates compliance with the AMLI Act export licence and whether the international transport arrangements for the livestock are adequate for their health and welfare.

The department's policy and legislative framework establishes the objectives, outcomes and the risk of harm. In seeking to provide useful recommendations for the department, and observations for industry, this report examines the extent to which monitoring and reporting on live export voyages aligns with concepts of regulatory best practice aimed at achieving these objectives and outcomes.

General observations of the department's regulatory practice

Best practice regulation may be described as a dynamic combination of a range of regulatory practice concepts tailored to the operating context. In the context of livestock exports, a range of risks need to be controlled by the regulator. Best practice regulation involves alignment between regulators efforts and the control and mitigation of identified risks of harm and non-compliance.

The department has made important progress in its regulatory practice and capability improvement in response to the Moss Review. However, significant opportunity exists for the department to further improve if it shifts the regulatory model to a more integrated and outcome-focused approach. To achieve this, the department needs to understand risks to objectives and use data, intelligence and analytics to target regulatory work. Increasing the efficiency of administration for straightforward decision-making, and reducing the amount of effort on general regulatory activity, can free resources for this work. It will also provide opportunities to deliver more timely decisions and reduce the cost burden for industry.

The term 'reward' features in a range of submissions and documents relating to the livestock export trade. Best practice regulatory performance is rewarded inherently, through:

- less intrusive and frequent regulatory monitoring (for example, through audit and inspection)
- less prescriptive regulatory requirements (for example, more flexibility in how a business might best achieve outcomes)
- faster and more efficient decision-making on permits and licensing
- not having corrective or sanction actions taken.

This may also be considered as part of any review of the cost recovery framework aimed at delivering overall lower regulatory costs to regulated parties, as well as lower specific fees and charges to those who are least burdensome on the regulators time and effort.

Focus areas for improved regulatory practice

Focus areas for improved regulatory practice include:

- sanctions (detection and consequences)
- transparency
- preventing and mitigating harm
- clarity of purpose (facilitation and regulation).

Sanctions (detection and consequences)

The department's credibility as a regulator has been severely criticised in a number of reviews with a consistent message that it does not deal well with the dual roles as a facilitator of trade and a regulator. The department demonstrates effective management of this conflict by actively detecting non-compliance and poor behaviours (rather than third parties like Animals Australia and Vets Against Live Exports raising issues) and taking action.

In their submission to the Moss Review, Animals Australia noted that:

... the excessively broad level of discretion currently afforded to the Secretary ... has facilitated an unacceptable level of 'leniency' towards exporters, even in the context of repeat offenders, which has generated and sustained a culture of non-compliance in the live animal export industry.

This view was consistent across stakeholders. The Australian Livestock and Rural Transporters' Association submission to the Moss Review stated:

At worst, an exporter can expect to be asked to give a commitment to developing better practices for future shipments ... neither individual ships or exporters are sanctioned ... the prevailing departmental culture of regulating in favour of trade, combined with a light touch enforcement approach, has not been a sufficient deterrent to engaging in risky practices amongst exporters.

Otway Livestock Exports also raised this issue in their submission to the Moss Review:

... if there is grounds, use a big stick. Use it sparingly, but decisively and swiftly when the outcomes or thresholds are breached to send a strong message and change bad behaviour.

The Sheep Producers Association raised similar concerns:

SPA considers that, as the regulator, the Department has not effectively enforced ASEL or reported in an accurate and meaningful way on the outcomes of investigations into mortalities to ensure ongoing improvement to animal welfare standards and bring transgressors to account.

The department needs to use the sanctions it has available more often, more effectively, and escalate its response in the face of repeated non-compliance more resolutely. This includes court actions, significant licence suspensions, and licence cancellations. Breaches and sanctions need to be publicised—as a deterrent, for transparency and to demonstrate the department's commitment to its regulatory role. This should be in a single easily accessible reporting table on the department's website that is regularly updated.

It is clear though that the department has been hampered in the regulation of livestock exports by a legal framework that is dated and arguably not well aligned to the current objectives. A key issue is that the sanctions currently available to the regulator may be described as last resort sanctions. These include the suspension or cancellation of licences and permits, and court action for civil and criminal offence proceedings. Regulatory practice and decision-making has also previously been hampered because of a lack of clarity in decision-making between the department's trade facilitation and trade regulation roles (Moss 2018, chapters 5 and 6, recommendations 13, 14, 20 and 21).

The Export Control Bill 2019, incorporates significant modernisation of the regulatory tools available that would enable better practice by the department. The Moss Review also commented on this (Moss 2018, paragraph 101). If parliament passes the Export Control Bill 2019, the department should be prepared to roll out the improved action and sanctions regime from the date of commencement.

Transparency

The department needs to comply with the Australian Government confidentiality and privacy requirements, increase transparency and adopt an 'if not, why not' approach to the publication and release of material. The regulation of livestock exports has always had strong stakeholder and public interest. Perceptions of secrecy or 'covering over' issues do not instil trust and confidence. The department should review how it can improve and increase the publication of all key elements of its regulatory framework in a timely manner—for example, regulatory decisions and their reasons, investigations and their conclusions, and reports.

Preventing and mitigating harm

In their submission to the Moss Review, Otway Livestock Exports noted that:

We spend all our life completing paperwork to justify our existence to the Department and their auditors, yet with no meaningful ramifications if we fail to execute operationally.

As discussed in [Best practice regulation](#), and in the recommendations in this review, the department should target its regulatory efforts on preventing and mitigating harm (ensuring that industry participants execute operationally). This is the most critical element in giving

effect to the Moss Review recommendation of adopting a 'dynamic and forward looking posture to its regulatory responsibilities' (Moss 2018, recommendation 5).

Clarity of purpose (facilitation and regulation)

The Moss Review (chapters 5 and 6) and a number of submissions have raised the potential conflict between the department's role as a facilitator of trade and as a regulator of trade. A number of Moss Review recommendations, and the department's responses to them, seek to reconcile this potential conflict.

The challenge for the department is to ensure that regulatory governance and decision-making are clearly focused on the prevention and reduction of harm and the mitigation of risk. A track record of taking firm but fair action against poor performers demonstrates that regulatory decision making is not clouded by trade facilitation considerations. This would allay many of the concerns of stakeholders about this conflict.

This review has heard concerns from a number of exporters and other industry participants that the consequence of departmental staff reacting to this conflict has been a reduction in engagement and responsiveness to specific circumstances or inquiries. This is a common reaction from regulatory staff that have been involved in a significant community confidence issue and consequent review process. The department needs to ensure that staff understand that good regulatory practice includes providing advice and assisting regulated parties through regulatory processes. Listening, advising and assisting can all be part of encouraging and supporting voluntary compliance. The department must manage the risk of capture, favour, or 'bending' regulatory requirements. Engagement and communication with industry should not be reduced as a means of managing this risk.

Livestock export voyages

To prevent or mitigate the risk of harm on voyages the department needs to understand the factors that affect these risks, and the ways in which these risks can be eliminated or mitigated. These factors occur across the full supply chain:

- production or selection (for example, the climatic zone of production, the vaccination regime of the animals, handling and feeding, breeding line and species, age and weight)
- trucking transportation to the registered premises and from the registered premises to the vessel (for example, distance or time in transport, weather conditions during transportation, injury, screening, rejection and treatment)
- pre-export quarantine (for example, length of time in the feedlot, health screening, rejection, treatment, shearing practices, adjustment to feed types and weather)
- timing of voyage (for example, the department's northern summer prohibition on sheep exports, weather and marine forecasts)
- loading the vessel (for example, Heat Stress Risk Assessment, stocking density, weights, fodder type and quantities, water and bedding)
- the vessel (for example, Australian Maritime Safety Authority standards on ventilation, feed and water systems and pen designs).

The regulator and the industry have made significant efforts to address these factors. Further opportunities exist to mitigate the risks of harm on voyages throughout the supply chain, and in preparation for export, due to the number of factors that contribute to risk. Both the department and industry should proactively review these opportunities for continuous improvement to animal welfare outcomes.

This review is about the voyage itself and is focused on the variables that contribute to risk once livestock have been loaded. Standards and requirements can, and do, mitigate a number of these factors. For example, this review heard evidence of a significant reduction in sheep mortalities on voyages to the Middle East that was attributed to reduced stocking density and the department's 3.5-month summer prohibition. Accordingly, compliance with these standards and requirements, and the role of the regulator in assuring compliance, are important contributors to risk mitigation.

However, focussing purely on compliance is unlikely to be sufficient in all circumstances. The actions and responses of the exporter, their staff and contractors are critical to the outcome of mitigating the risk of harm to the health and welfare of animals during the voyage. Exporters, staff and contractors (for example, accredited stockpersons, Australian Government accredited veterinarians, vessel masters, crew and ship owners) must proactively and dynamically monitor for, identify, and manage potential and emerging risks and incidents. The department's regulatory practice needs to focus on encouraging, supporting, and requiring exporters and their staff, contractors and service providers to act in this way. Exporters who do not act in this way need to be identified and required to improve their performance, including through appropriate sanctions.

To achieve the regulatory outcome, industry exporters need to have people, systems and processes in place that:

- demonstrate compliance with ASEL requirements
- proactively mitigate and eliminate risks
- demonstrate proactive planning for contingencies (McCarthy 2018, section 6.1.15)
- respond to potential and emerging risk based on this planning
- capture lessons learned and embrace continuous improvement
- demonstrate with voyages that meet all standards and maintain high levels of animal welfare.

The department introduced a framework of approved arrangements for livestock exports in 2016 and 2017. The department's guidelines for approved arrangements indicates that they outline an exporter's commitment, describe its business systems, and detail the procedures to ensure livestock exported from Australia meet:

- the Australian Standards for the Export of Livestock (ASEL)
- importing country requirements
- relevant Australian Government and state and territory legislation.

Importantly, the department also indicates that approved arrangements require quality assurance procedures to be in place to ensure that the business systems used by the exporter are effective and manage risks.

The 'Regulatory Impact Statement: Approved arrangements for livestock exports' made the observation that the system in place at that time:

... does not take into account exporter performance, or provide incentives for good performance. This has discouraged exporters from continuing to invest in better practices, when exporters with poor compliance receive little to no penalties for their actions (Department of Agriculture and Water Resources 2015, p. 17).

The RIS discusses the effectiveness of implementing approved arrangements in other spheres stating:

... benefits include a less prescriptive and more outcomes-based system, giving exporters greater responsibility but also flexibility and control over the export process (Department of Agriculture and Water Resources 2015, p. 18).

The department should continue to refine the approved arrangements framework to deliver the benefits of a streamlined administrative process. Exporters can then provide assurance to the department that they have the requisite processes and systems in place. However, the lens for this needs to be adjusted from one that is weighted towards process and compliance to one that also allows the department to test exporter's quality and contingency management systems and practices. In particular, dynamic risk-identification, risk-management, and continuous improvement—through focused regulatory scrutiny. For example, unannounced horizontal and vertical audits, compliance campaigns and projects, verification and analysis.

3 Monitoring, reporting and record keeping

Monitoring

It is important to differentiate between the monitoring required of, and undertaken by, participants within the livestock export industry and the regulatory monitoring of those participants. In this report, regulatory monitoring of industry participants incorporates activities such as audit, inspection, investigation and analysis.

Purpose of monitoring

The purpose of monitoring during live export voyages needs to be clear. The 2 categories of monitoring are:

- 1) monitoring to inform the management of risk (which also contributes to the second category)
- 2) monitoring to increase knowledge (for research, policy development, improved practices and public information).

In this regard the Australian Government accredited veterinarians (AAV) Working Group submission stated 'it is apparent and reasonable that the department requires a system that:

- ensures compliance with Australian legislation
- identifies in-voyage risks to animal welfare to inform decisions to prevent or control poor welfare outcomes during a voyage through provision of appropriate advice or interventions
- to identify medium to long term industry trends in risks to animal welfare and systematically make improvements to the regulatory system to reduce these risks
- to identify long term industry trends for public information about the livestock export trade or provision of information to other government departments such as the Australian Bureau of Statistics or Treasury for economic analysis' (AAV submission 2019).

Monitoring to inform the management of risk

Monitoring to inform the management of risk on livestock export voyages provides information to support day-to-day operations and management of livestock. If all factors being monitored are within acceptable bounds, the daily routines and practices on board might be described as business-as-usual. In discussions with a range of Independent Observers, stockpersons and Australian Government accredited veterinarians, the predominant status during voyages was business-as-usual.

However, if factors being monitored move outside acceptable bounds, or reach a predetermined trigger level that indicates emerging or potential risk to health or welfare, a set of actions or responses would be expected. In the first instance, this might be an increase in the frequency, location and nature of monitoring or an increase in direct action designed to mitigate the emerging or potential risk, or both.

Examples of monitoring to inform the management of risk include:

- deck temperatures (wet and dry bulb)
- ammonia levels
- pen pad conditions (provision of adequate bedding, bogging)
- morbidity
- panting score, demeanour observations, ability to lie down, faecal coating
- mortality
- weather conditions and forecasts
- feed trough condition and feed availability
- water trough condition and water availability
- signs of shy feeding
- feed and water consumption
- log of ventilation system maintenance and performance
- environmental monitoring equipment maintenance and calibration (for example, wet bulb thermometer)
- log of veterinary medication used and equipment maintenance and calibration.

Monitoring to increase knowledge

Monitoring to inform the management of risk often contributes usefully to the body of knowledge. It may also be desirable to monitor additional parameters and factors aimed at improving understanding of:

- trends in animal welfare management
- improving the indicators or parameters that inform risk management
- pathology of diseases
- contributing to economic or policy development, standards and design (for example, vessel design).

The department should consider requiring monitoring of this nature, in consultation with a broad range of stakeholders and subject matter experts—including industry.

Industry research is also important in this regard. Collaboration should occur between the department, industry and research bodies to determine what might best be monitored as part of a research program. Industry research should occur in a targeted way rather than as a general monitoring requirement.

Reporting and record keeping

The review was satisfied that there was general support for, and utility in, the overall framework of daily and end-of-voyage reports. However, monitoring, reporting and record keeping are

often conflated. To understand reporting as part of a regulatory regime it is important to be clear about the purposes of reporting.

Record keeping is an additional and sometimes overlooked element of a regulatory monitoring and reporting regime. An industry participant may be required to undertake a range of monitoring activities to be able to actively manage risks (see [Livestock exporter role](#)), demonstrate compliance or contribute to knowledge. However, that does not automatically mean the regulator needs to be provided with that data. It may be critical for the regulator, as part of its assurance and compliance regime (for example, audit, inspection, analysis, or investigation processes) to be able to access the records of industry participants. The requirements in a reporting regime should clarify what is being monitored, for what purpose, and what record keeping is required.

The 4 key purposes in a reporting regime are:

- reporting to manage risk
- reporting to assure compliance
- reporting of incidents and events (sometimes called exception reporting)
- reporting to gather information to increase knowledge (for example, for policy and research, welfare standards, vessel profiles, public information and transparency).

As discussed earlier, where monitoring demonstrates that nothing exceptional is occurring, or activities are business-as-usual, data points and observations can be reported in a summary manner to meet all 4 reporting purposes.

Requirements for keeping records allows the regulator to inspect or audit to determine that the monitoring was occurring as it should have been, and that it was interpreted and utilised as it was required to be (that is, exceptions were identified and action was taken). This can take place as part of regular audit processes, an unannounced regulatory monitoring project, or in response to an incident or event. Sound record keeping, particularly where automatic instrumentation is involved but also where observations and recording are routine, can alleviate the complexity and burden of reporting. Increased reporting on its own may not meaningfully improve the management of risk or increase compliance.

This review has examined monitoring, reporting and record keeping on voyages on this basis.

4 Data quality, standards and analysis

Data quality and standards

Irrespective of the purpose for which data is being collected, the way in which it is collected and stored is important.

Data can be broadly described as being quantitative or qualitative. For quantitative data (for example, dry and wet bulb temperatures and ammonia levels) the unit of measure as well as the standards for measurement need to be specified. This should draw on Australian and international standards and practices, and be codified to ensure consistency across all industry participants. Quantitative data required under ASEL—such as animal mortality, veterinary medication availability and usage, feed and water consumption averages per head, bedding availability and usage—should have specified standards (if they are not self-evident).

Livestock export voyage monitoring also includes a significant range of important qualitative data. Some qualitative data—such as disease diagnoses, clinical and pathology observations—are the work of veterinarians who have been extensively and specifically trained. However, other qualitative data may be collected by a range of people (for example, stockpersons, crew and non-veterinary Independent Observers) who may not have veterinary qualifications. This data is usually collected through either direct observation or through photographic and video recordings (for example, of pad conditions, animal demeanour and panting scores).

For observation-based qualitative data to be useful it needs to be as standardised and comparable as possible to reduce subjectivity. The department needs to work closely with industry participants, as well as technical and stakeholder experts, to develop quality guidance material, training and competency assessment processes to reduce subjective variation in observations and interpretations.

The use of both a panting score and a heat stress score should be a mandatory requirement in the daily report. A training module may be required to ensure that score allocation is consistent across industry (McCarthy 2018, recommendation 19).

The department has made progress on quantitative and qualitative data standards and quality through the ASEL review and other work. It would be useful for this to be brought together in a coherent data quality and management strategy to ensure that industry participants and broader stakeholders understand the data standards that are in place, and can engage the department on areas that are subject to further development.

The department has also made significant progress in response on automation of animal welfare indicators onboard vessels, particularly in relation to temperature and humidity (Moss Review, recommendation 24). Automated collection of data can:

- reduce the impost on personnel during voyages when attention to caring for the livestock is more important
- create a verifiable data set for compliance, investigation or research purposes
- reduce human error in measurement and recording

- provide assurance to the community that animal health and welfare is subject to rigorous regulatory scrutiny
- provide a real time set of environmental indicators to support risk elimination or reduction during the voyage.

The Inspector-General's review observed examples of comparative analysis between manually collected deck temperature and humidity data, and automated data logging. In a number of instances this demonstrated a concerning variation that raises questions about the usefulness of manually collected deck data. This variation may be due to a range of factors including single manual readings at a time of day that may not reflect the hottest time of day.

Additionally, this review heard a range of views on the efficacy of the Independent Observer program and notes that the department is intending to adjust the program to deploy Independent Observers on a more risk-based approach. Concerns were also raised about additional monitoring requirements distracting stockpersons and Australian Government accredited veterinarians from their work in caring for animals. This review supports a change in the approach to Independent Observers, but not in isolation to other aspects of the regulatory approach (see [Independent Observers](#)). Increased automation is one such aspect as it can improve the effectiveness of monitoring in a cost-efficient manner.

The department, working closely with the Australian Maritime Safety Authority, should require automated monitoring of temperature and humidity on live export vessels incorporating real-time access for people onboard and verifiable data loggers to establish a record for regulatory scrutiny. Live or regular reporting of the extensive data points generated by such a system may only be required on an exception basis (see [Monitoring, reporting and record keeping](#)).

For livestock export voyages the requirements for instrumentation, calibration, and data recording and retention may need to be adapted to ensure they are reasonable and practicable for the operating environment. Vessels for livestock export may pose some difficulties. A co-design consultative process with relevant industry participants and technical experts would be appropriate in determining collection, instrumentation, recording and storage requirements and standards. The department has progressed this issue in response to Moss Review recommendation 24. However, a clear implementation date should be determined to assist the department and industry resolve any remaining barriers in a timely manner.

Photographic and video monitoring can also provide an important tool for assuring compliance and verifying qualitative observations, as well as potentially assisting those onboard to identify and respond to issues. It also has significant value as a transparency mechanism that may increase community confidence. CCTV cameras are readily available and can be configured, along with verifiable data logging systems, to take periodic photographs or short videos of the livestock. Verifiable records contribute to regulatory monitoring as well as incident or event investigations (see [Monitoring, reporting and record keeping](#)). However, routine reporting of this type of data can require significant data transfer, storage infrastructure and costs. Accordingly, requiring that livestock be monitored and verifiable records be retained is important, but requiring the data to be reported may only be practicable on an incident, near miss event or regulatory monitoring basis (for example, an audit).

Data analysis

Submissions and discussions with stakeholders raised significant concerns about the storage, access and analysis of data reported from livestock export voyages. Examples of independent analysis of publicly available reported data demonstrated correlations between temperature, heat stress and mortality, and anomalies in reporting. This highlighted a deficit in the department's capability and approach to effectively use data and reports to inform standards, policy and regulation. A number of Australian Government accredited veterinarians also raised concerns about data analysis. They drew attention to years of weekly and end-of-voyage reports that had the potential to contribute to continuous improvement in the industry but had not been utilised. Similar submissions were made to the Moss Review and were implicit in a number of recommendations (for example, 3, 5, 6, 9, 14, 17, 22, 23).

In the October 2019 Moss Review implementation progress report, the department indicated that they are improving information technology infrastructure as resources allow. Advanced information technology database systems and analytical capability are desirable but are likely to take some time. However, the department can ensure that the data it obtains is received to a quality standard, and in formats that readily facilitate analysis in a range of available software products.

The department has been progressing the use of technology with the development of an Independent Observer mobile device application (IO App) that uploads data to a central repository for storage and analysis. Industry has also been working on applications such as LiveXconnect that allow monitoring data to be consistently recorded and uploaded. The department and industry have the opportunity to co-design electronic reporting formats that would interface with the department's systems to increase the efficiency of reporting, improve consistency and quality, and facilitate analysis.

An opportunity also exists for increased collaboration and greater data sharing between the department, independent researchers, and industry research bodies. There are significant privacy and confidentiality barriers to be overcome. However, the department and industry have both committed to increased transparency and these barriers should be worked through with an 'if not, why not' approach to data and research sharing. A number of stakeholders raised concerns about the perception of a lack of transparency in research and data, which can undermine community confidence. The department should pursue commitments to transparency through any agreements it might reach on data sharing and, potentially, through research funding mechanisms.

The department has also made significant progress on enhancing its own data analysis skills and capability, and making greater use of industry and independent experts, to inform standards, policy and regulation. This includes putting in place the ASEL review Technical Advisory Committee, establishing the Animal Welfare Branch, and establishing a Technical Analysis Team with epidemiological and data analysis capability. Initial analytical products provided to this review by the Technical Analysis Team were promising. This capability should continue to be developed and adequately resourced.

An increase in analytical capability should also be developed and directed at industry participants and assets (for example, vessels). This would support a more advanced risk-based understanding of industry participants. Improved analytics increases the department's ability to

target poor performers, or circumstances that might increase the risk of non-compliant or risk taking behaviours. For vessels this would also support development of a profile—for example, identify problematic decks or pens under a range of circumstances—that could be a useful risk management resource for exporters, stockpersons and Australian Government accredited veterinarians. It would also be another input into proactive regulatory projects.

Recommendations

- 1) That the department develop a data quality and management strategy that:
 - a) adopts the Australian Government’s quantitative data standards
 - b) includes actions to develop detailed guidance and training resources for all qualitative data to reduce subjectivity
 - c) utilises co-design to develop electronic report formats that increase standardisation and support data upload for analysis.
 - d) supports clear, accurate and efficient reporting.
- 2) That the department work with the Australian Maritime Safety Authority to require all vessels used in the live export trade to install automated:
 - a) CCTV cameras to record representative pens on all decks, and any pens that have been identified as problematic
 - b) wet and dry bulb temperature monitors at representative locations on each deck and on the bridge
 - c) data loggers that can provide monitored data to those onboard in real time, and that retain data records in a verifiable form for compliance purposes.
- 3) That the department increase the resourcing and capability of the Technical Analysis Team in both statistical analytical expertise and epidemiological expertise. This analytical capability should include expertise in identifying other areas of risk such as participant behaviour, drivers and asset performance (for example, vessels, decks and pens).

5 Livestock exporters

Livestock exporter role

Livestock exporters are the primary parties regulated by the department under the livestock exports regulatory regime. Exporters' legal responsibilities involve compliance with state and territory animal welfare and animal disease control legislation, the *Export Control Act 1982*, *Australian Meat and Live-stock Industry Act 1997* (AMLI Act), the Export Control (Animals) Order 2004 and the Australian Standards for the Export of Livestock. It is important to understand these responsibilities when considering how the various dimensions of regulatory practice interact and how they might apply to both exporters and the other key players involved in livestock export voyages. The exporter is the primary entity undertaking the activity that is subject to regulation. Therefore, the exporter has ultimate responsibility for regulatory compliance and the outcome of each export activity it undertakes.

Exporters are responsible for engaging or employing the accredited stockperson, Australian Government accredited veterinarians (AAVs), vessel masters, and crew, to manage the voyage in accordance with the terms of engagement, contract or employment. It is through these mechanisms that the exporter can, and should, ensure that they meet regulatory requirements.

The export of livestock from Australia is prohibited unless the exporter is granted a licence under the AMLI Act. An exporter who has been granted a licence must also hold an arrangement approved in accordance with s1A.07 of the Export Control (Animals) Order 2004. Exporters must also have an Approved Export Plan, which forms part of the exporter's instructions for any AAVs that it engages. Instructions for shipboard AAVs must be collated and issued to each shipboard veterinarian accompanying consignments (see [Export Advisory Notice 2018-07](#)).

Approved arrangements form part of the department's regulatory approach to enable trade and manage risks. The approved arrangement describes the operations which, when correctly applied by the exporter, will effectively meet legislative requirements and manage the preparation of livestock exported from Australia. This approach is consistent with how the department applies approved arrangements to other export commodities.

To summarise, the vessel master and crew, AAVs and accredited stockpersons are part of an exporters' enterprise that collectively manage the voyage on behalf of the exporter, under their instruction.

The vessel master has important regulatory obligations regarding livestock exports under Marine Order 43 and the ASEL. Australian Government accredited veterinarians also have important regulatory obligations under the legislation and ASEL (see [Vessel masters](#) and [Australian Government accredited veterinarians](#)).

Discussion

Idealised outcomes-based regulation would specify the animal health and welfare outcome required of exporters and detect when this outcome was not achieved, with regulatory sanctions and actions applied as appropriate. However, specifying outcomes for animal health and welfare is not precise. The Technical Advisory Committee's (TAC) final report usefully describes where standards lie in this regard stating:

The committee is mindful that the current standards are predominately input based, rather than outcomes based. This approach assumes that if the inputs are controlled, then a satisfactory animal welfare outcome will follow. The committee also notes that, while best practice is to focus on the outcomes desired, there still needs to be a minimum set of standards that clearly articulate what society expects all exporters to meet. The committee's recommendations have been made with this risk/debate in mind. Notwithstanding that, the committee believes there should be scope for the regulator to reward superior performance based on demonstrated outcomes, and that over time, the standards could evolve to a more outcomes driven approach (ASEL Review Technical Advisory Committee 2018, p. vi).

As discussed in relation to approved arrangements, the department has put in place a framework intended to support a more outcomes based approach.

In August 2017, more than 2,400 sheep died of heat stress onboard the MV Awassi Express voyage to the middle East. A consequence of the Awassi Express incident for all exporters, as well as for the department as the regulator, was a loss of community trust and confidence in the face of compelling evidence of a failure to ensure acceptable levels of animal health and welfare. This led to an increased focus on the control of inputs, or prescriptive regulation, including a more prescriptive inspection regime (for example, Independent Observers) and examination of industry plans and operating procedures. Some exporters raised concerns that the department was requiring new or increased documentation contrary to their understanding of how approved arrangements would work, and not necessarily aligned with their perception of actual risk.

A strict compliance regime alone (or, as described by the TAC, a strict control of inputs) is unlikely to mitigate the risk of harm to animal health or welfare alone (see [Best practice regulation](#)). As one exporter observed:

... it needs to be recognised that risk mitigation is based on exporter and vessel experience and sound cattle preparation. Nothing can replace good, experienced stockmen, AAVs and vessel personnel or proactive exporters putting in place their own Standard Operating Procedures for best practice cattle management and preparation (AUSTREX submission).

The challenge for the department's regulatory approach is to encourage best practice risk management by exporters on voyages. This includes detecting poor risk management and using proportionate regulatory action to drive improvement. This action could include suspending or excluding recalcitrant exporters. For poor performers, systemic levels of technical or administrative breaches are an indication of poor business practice and corporate governance and should lead to escalation and real sanctions to drive improvement. At a higher level, the department should evolve the approved arrangements framework to seek to encourage exporters to have in place '... their own Standard Operating Procedures for best practice ... management and preparation' as well as a dynamic process of risk management.

Conclusion

The department should continue to refine the approved arrangements framework to deliver the benefits of streamlined administrative processes for exporters. This would demonstrate that exporters have the requisite processes and systems in place. It would also build community confidence in the department's ability to manage this process.

However, the department needs to move away from a process-driven approach to focus on regulatory scrutiny, testing exporters' quality and contingency management systems and practices—particularly dynamic risk identification, risk management and continuous improvement. Examples of this approach include unannounced horizontal and vertical audits, compliance campaigns and projects, verification and analysis (Moss 2018, recommendation 7).

For this approach to be effective the department will need to define the characteristics of a dynamic risk-management process for voyages in the approved arrangements. The conditions of an exporter's licence may be the best way to ensure this is enforceable. For example, licence conditions may require reasonable and practicable action to be taken to eliminate or mitigate a foreseeable risk. Audit, compliance and inspection activities can monitor the risk-management process, with appropriate regulatory sanctions for non-compliance. Investigations of reportable incidents, or near misses, can examine the effectiveness of an exporter's risk management plan and determine whether reasonable and practicable actions were taken.

The department should also examine the applicability of observations of the Inspector-General of Biosecurity (2019), particularly:

- Recommendation 3—The department should implement a program of unannounced, randomly timed and risk-based audits of approved arrangements, rather than scheduled and announced audits, wherever possible.
- Recommendation 12—The department should develop more effective policies, processes and instructional material to manage critical non-compliance at an approved arrangement, including clarifying processes for suspension or revocation of its approval, as well as contingency response plans for such eventualities, and timely sanctions for less serious non-compliance.

The regulator wants industry participants' knowledge, skills, business systems and processes to optimise outcomes across business risks, rather than just being compliant. Business risks include non-compliance, reputational damage to themselves or their industry through animal health and welfare incidents (and loss of value from their export), or failing to meet importing country requirements.

A business that is performing well may find compliance monitoring activities inconvenient. However, a risk-based model means these activities occur less frequently and—if their systems and processes are in place and operating well—the interaction will be relatively efficient. Poorer performing businesses can anticipate more frequent attention and escalating sanctions until their practices no longer threaten the objectives of the regulator. A technical or administrative non-compliance may be viewed as non-material and non-systemic, attracting a warning or corrective letter. Continued non-material breaches should warn the regulator about the efficacy of the industry participant's business systems and their continuous improvement behaviour.

Multiple non-material breaches indicate a systemic problem and stronger regulatory responses should be taken, including court action, if the performance does not improve.

Recommendation

- 4) That the department reframe approved arrangements for exporters to:
 - a) deliver the benefits of streamlined documentation and approval processes
 - b) incorporate characteristics and indicators of dynamic risk management as a requirement of exporters operating under their approved arrangements
 - c) ensure that demonstrating dynamic risk management by an exporter is an enforceable requirement
 - d) design and undertake unannounced and targeted regulatory projects aimed at detecting poor dynamic risk management.

6 Independent Observers

The Independent Observer program

The Independent Observer deployment program commenced in April 2018 as part of the government's response to footage of live sheep on board the Awassi Express. The first Independent Observer deployment was on a sheep and cattle voyage to Turkey on the MV Maysora in April 2018. The department continued to build the program, deploying Independent Observers on a range of voyages over the following months.

The then Minister for Agriculture and Water Resources, the Hon David Littleproud, announced a further expansion of the program, committing to an Independent Observer on every export voyage by sea by the end of October 2018:

I need truth and proof on those boats. I don't want to have an incident in live cattle exports as we did in sheep, because that will be the end of us. We have to be proactive (Phelps 2018).

In response to the Minister's announcement, the department published an export advisory notice confirming that the department is working towards providing Independent Observers on all vessels exporting livestock departing Australia from 1 November 2018:

The IO will undertake audit activities whilst on the vessel confirming the arrangements the exporter has in place to manage the livestock in accordance with Standard 5 of the Australian Standards for the Export of Livestock (ASEL) (Department of Agriculture and Water Resources 2018d).

The department also issued a revised charging guideline on a per consignment basis for exporters. The charging guideline indicated that Independent Observers would be monitoring the activities and statutory duties carried out by those personnel who are responsible for welfare, animal care and husbandry—the vessel master, shipboard Australian Government accredited veterinarian (AAV) or the accredited stockperson (Department of Agriculture and Water Resources 2018d).

The initiation of the Independent Observer program was an important addition to the regulatory monitoring options available to the department. It provided an active presence on voyages to provide assurance to the government, livestock export industry, stakeholders and the general public that the welfare of animals being transported on livestock vessels was being appropriately managed, in accordance with legislation and standards.

The review heard a range of views from stakeholders on the purpose of Independent Observers, which indicated a level of confusion. Some of this confusion resulted from an early lack of clarity of role, the way in which this was communicated by the department, and the lack of trust in the department as the regulator. Some stakeholders expected Independent Observers to be independent of the department, as well as of the exporters. Others expected Independent Observers, where they were veterinarians, to be effectively undertaking the work of an AAV.

The role of Independent Observers

Independent Observers are regulatory officers of the department. They are authorised officers under the live animal exports legislation, acting in a regulatory capacity to undertake specific regulatory monitoring activities aimed at ensuring compliance. Their role complements the role of a departmental auditor, a compliance investigations officer or a regional veterinary officer. The Department of Agriculture and Water Resources (2018c) states that:

Independent observers do not take an active role in animal management during the voyage. Their primary role is to observe and document the activities ...

While the intent of the role is to observe and document as part of a compliance regime, it is important to note that, as authorised officers, Independent Observers can, in some circumstances, exercise powers to intervene during voyages if required. Such an intervention would be appropriate where the Independent Observer considered that animal health and welfare was being compromised, or if there was an imminent risk of it being compromised. The duty statement of Independent Observers includes:

The Independent Observer role is integral in providing assurance to industry, the public and government that the welfare of animals being transported on vessels is appropriately managed. The Independent Observer will provide regular reporting to enable assessment of compliance against ASEL and the AEP [Approved Export Program]. They may exercise regulatory authority to immediately address onboard animal welfare issues or non-compliance with livestock management requirements during the voyage (Department of Agriculture 2019d).

The Department of Agriculture and Water Resources (2018c) expands on the purpose, legislative overview, background and powers of Independent Observers. They are:

Placed on a livestock vessel to undertake some or all of the activities in an approved export program set by the Secretary, or to monitor, review or audit the activities of the Australian Government accredited veterinarians and exporters under their approved export program for the voyage.

More recently, the purpose of the Independent Observer program was described by the department as:

... the independent observers and the footage and records that they take and the observations that they make on vessels are first and foremost about helping us as a regulator to identify poor performance and to act on that performance. There have been comments made publicly about the delay in releasing independent observer summary reports et cetera. We accept that and take it on the chin, but really our first interest after receiving independent observer reports is to take any regulatory action that is required. That is what we use them for primarily ... (Senate Rural and Regional Affairs and Transport Legislation Committee 2019).

This is consistent with how the department has characterised the role of Independent Observers in the *Compliance statement for export of livestock*:

The role of the independent observer is to monitor and review livestock management practices during export voyages to ensure animal welfare standards are being met. The independent observer provides regular reporting to assess compliance against Australian Standards for the Export of Livestock and the exporter's or Secretary's approved export plans (Department of Agriculture 2019a).

The role of the Independent Observer is underpinned by a legal framework that includes linkage to the Export Control Act, Export Control (Animals) Order, ASEL and the Approved Export Program (Box 1).

Box 1 Legal framework for Independent Observers

The relationship between the the *Export Controls Act 1982*, the Secretary's AEP' and the Export Control (Animals) Order 2004 that forms the legal framework for Independent Observers is as follows:

- Export Advisory Notice 2018-07 provides context for the legislative relationship between the Independent Observer's role and the exporter's Approved Export Program (AEP). Subsection 9A(2) of the *Export Control Act 1982* defines an AEP as 'a written program of activities to be undertaken by an accredited veterinarian or an authorised officer for the purpose of ensuring the health and welfare of live animals during export activities'.
- AEP activities include preparing animals for export through to their disembarkation in the importing country. The Independent Observer conducts monitoring activities and provides regular reports to assess compliance against ASEL and the exporter's AEP, or the Secretary's AEP as directed under sections 9D and 9E of the *Export Control Act 1982*.
- In this review, the exporter's AEP refers to shipboard Australian Government accredited veterinarians' instructions and their concurrent monitoring and reporting obligations.
- The Secretary's AEP provides the legal link allowing the same monitoring activities and regular reporting on the health and welfare of animals to be undertaken by the Independent Observer. These requirements are set out under Section 1A.45 (1) of the Export Control (Animals) Order 2004.

Establishment of the Independent Observer program

The fact that the department commenced the program so quickly, and increased its scale over a relatively short timeframe, is a commendable achievement. However, a number of the criticisms of the Independent Observer program can be attributed to the challenges faced by the department in establishing and building the program so quickly. It was a logistically difficult exercise with complex staffing, work health and safety, training and reporting issues to overcome.

Initially, the department drew on departmental staff with relevant skills and background to be Independent Observers. These staff were already engaged in the delivery of departmental functions. The department also recruited full-time positions for Independent Observers to have sufficient resources to meet the target of deploying them on all voyages. The nature of the role is difficult due to the uncertainty in deployment timing and the nature of onboard work. This has meant that the department has to continue to actively recruit Independent Observers with relevant skills. The current pool of staff involved in the program is made up of full-time dedicated Independent Observers and staff who do occasional ad hoc voyages.

Independent Observers include officers with veterinary qualifications, as well as officers that meet selection criteria for non-veterinarian Independent Observers. Those with veterinary qualifications are generally deployed (but not always possible) on voyages where an AAV is deployed. Non-veterinary Independent Observers are generally deployed on voyages that do not require an Australian Government accredited veterinarian.

The review interviewed a number of staff involved in the management of the program and a number of Independent Observers. These interviews confirmed that the training of Independent Observers has been refined over time. Initially, the training was focused on corporate systems, processes, and onboard work health and safety requirements. Training has been progressively improved, based on the experiences gained from the program, to include increased elements on the regulatory role and reporting task, and the use of consistent reporting tools such as the IO App.

Monitoring and reporting

Independent Observers are required to monitor and report on activities in the AEP, including potential non-compliances and breaches.. An Independent Observer is placed on a vessel to monitor livestock management practices to ensure animal welfare standards are being met. They must keep accurate records of their observations, which are kept via a daily checklist, daily report template, photos and short videos. This has been refined through the experience gained earlier in the program, as initial reports were not supported by detailed operational guidance.

Stock management activities are detailed through daily reports, and additional data on animal observations and vessel infrastructure are captured through images and video footage. The daily reporting contributes to the compilation of a detailed report that is submitted at the completion of the voyage.

The department also prepares a summary of key observations derived from the Independent Observers report:

Summary Independent Observer Reports (SIORs) will summarise the independent observer's observations in relation to the approved export program on a given voyage (Department of Agriculture and Water Resources 2018c).

Summary [Independent observations of livestock export voyages by sea](#) are published on the department's website.

Problems with the Independent Observer program

The consequences of the program start up and evolution underpin many of the problems stakeholders identified, including:

- confusion of purpose
- extensive delays between voyages and publication of summary reports
- extensive delays between voyages and feedback to exporters on issues
- Independent Observer summary reports perceptions of sanitisation
- Not achieving the level of transparency expected

- failure to place Independent Observers on all voyages
- Independent Observer experience and skills, regulatory posture and onboard relationships
- efficiency (cost versus outcome).

Confusion about the role of Independent Observers is discussed in [The role of independent observers](#).

Stakeholders consistently raised concerns about the extensive delay between voyages and publication of SIORs. Vets Against Live Exports wrote in their submissions that the department:

... does not release the observer reports, but instead provides summaries, which from our research appear to be heavily censored (VALE 2019).

Often stakeholders that obtained original reports under Freedom of Information were concerned about apparent anomalies. This, in combination with the delays in publishing, has undermined confidence in the program to date. Exporters also raised concerns about the delay in publication and access to initial reports. Exporters indicated that this made it difficult to identify circumstances that might have led to an observation that the exporter was being required to address.

Despite the department's comments that the primary purpose of Independent Observers was as part of the regulator's assurance process, transparency is a critical element of community and stakeholder confidence in a regulatory regime. The media release from Minister Littleproud on 26 November 2018 stated that reports from Independent Observers were to be 'published as they are finalised to ensure no delay in proper transparency'. The delay in publishing summary reports, and the discrepancies between some Independent Observer reports and summary reports identified by stakeholders, has undermined the increase in community confidence that the program intended to achieve.

The review was advised by the department that the difficulty in achieving the original intent of the Independent Observer program was due to the rapid implementation of the program, compounded by the reduced capability in the department (identified as part of the Moss Review). At a practical level, initial Independent Observer reports were extensive documents developed by individual Independent Observers and included a wide range of subjective observations, substantial video and photographic material. This clearly overwhelmed the department's capacity to effectively analyse, respond where appropriate, and develop and publish summary reports in a timely manner.

The program has not achieved the intent of placing an Independent Observer on all livestock export voyages. Statistics provided by the department at Supplementary Budget Estimates (22 October 2019) included:

- the total number of livestock export voyages by sea from 1 April 2018 to 22 October 2019 was 506
- the number of voyages with an Independent Observer deployed on them was 184 during that period
- the number of Independent Observer reports finalised (reviewed, corrective actions implemented, summary published on department website) was 127.

The department indicated that these statistics were due to factors such as:

- a lack of cabin space on the vessel without displacing a member of the crew
- visa restrictions or advisory warnings
- changes in circumstances
- resource constraints (recruitment and technology) (Senate Rural and Regional Affairs and Transport Legislation Committee 2019).

The department also indicated that it had mechanisms in place to check the veracity of industry claims regarding cabin space availability.

Exporters raised concerns relating to the skills, experience, regulatory posture and onboard relationships of Independent Observers, including perceptions that Independent Observers:

- were unable to differentiate between urgent and non-urgent matters
- were an imposition on the crew because they directed or provided unnecessary advice to crew members
- had limited understanding of the behaviours of livestock.

A number of exporters felt that Independent Observers should have contributed to activities on the voyage given the high costs involved.

Exporters, and others in the industry, also consistently raised concerns about the cost effectiveness of the program. This includes concern about the duplication of reporting between Independent Observers and accredited stockpersons, AAVs and vessel masters. The Australian Livestock Exporters' Council submission also states:

... the cost burden of IOs on the industry is excessive, therefore the information provided by them must be unique and highly valuable (ALEC 2019).

Stakeholders also expressed a range of views on the overall benefit of the program, with some indicating they felt there was little benefit and others finding the program very useful. A number of stakeholders felt that the program should not only be continued but that the intent of having an Independent Observer on all voyages should be met.

In October 2019 the department indicated it was changing the Independent Observer program to deployment on a risk-based approach. This confirms the interim policy change to Independent Observer deployment that took place from September 2019. The department's reasoning for this change in policy is:

Based on information gathered by independent observers on more than 100 voyages, the department has a deeper understanding of the types of voyages where the deployment of an independent observer is most beneficial (Department of Agriculture 2019c).

The recent establishment of a veterinarian-led technical analysis team in the live animal exports division has 'amplified the department's access to evidence-based and up-to-date decision-making tools to ensure policy and regulation are responsive to changes in animal welfare

outcomes' (Department of Agriculture 2019e). The team provides a firm basis for continued improvement of the Independent Observer deployment program and its policies.

Conclusion

Stakeholders have a wide range of views on the nature of the role of Independent Observers and the effectiveness of the current program.

This review supports risk-based approaches generally, and considers that the effectiveness and the efficiency of the program would be increased if the department deployed Independent Observers as part of an integrated compliance monitoring program. Accordingly, the department should seek to implement a proportion of their regulatory monitoring through integrated compliance monitoring projects. These projects may include a horizontal audit and inspection of part, or all, of a live export voyage—from sourcing through to discharge. Projects of this nature would involve the department's live animal exports staff as well as auditors, compliance investigators, regional veterinary officers, and Independent Observers. To align with a best practice regulatory approach aimed at effectiveness and efficiency, a change in the use of one of the department's regulatory tools (Independent Observers) should not occur in isolation.

Stakeholders have been critical of the transparency and timeliness of the Independent Observer program, with significant lag times between voyages, feedback to industry participants and public summary report availability. As outlined, the Independent Observer program was instituted quickly and the department has undertaken a range of improvements to address concerns raised by stakeholders. As part of the program the department has obtained a substantial amount of information to inform policy and regulation. However, this information may not be in a form that is as accessible or useful as it could be. The department is currently developing tools to improve the program across areas of concern to stakeholders. These tools include a phone application to support Independent Observer reporting and a receiving database that can be interrogated more easily.

Where there are no compliance or animal health and welfare issues identified, or where any issues identified have been satisfactorily dealt with during the voyage, the department should commit to a service level target for the publication of a summary report following the conclusion of the voyage. An example of a service level target might be that 80% of summary reports be published within X business days of a voyage, and 100% of summary reports within Y business days.

A summary report should still be able to be published where there is a compliance or animal health and welfare issue that was identified and requires follow-up investigation or compliance action. The report should note that a compliance matter has been identified and that the report will be updated once the department's course of action has been determined. Report material that may be evidentiary or contestable may need to be excluded until the course of action has been concluded. The summary report should then be updated to explain the issue and the department's course of action.

Recommendations

- 5) That Independent Observers be deployed as part of a risk-based compliance monitoring program that includes:

- a) targeting of industry participants based on analysis, intelligence and the nature of voyages (with an element of random targeting)
 - b) a proportion of Independent Observer deployment occur as part of integrated audit and inspection projects
- 6) That Independent Observer summary reports be published within a service level commitment period after the conclusion of a voyage. Any matters under further investigation should be noted. Details of matters under investigation may be excluded, as appropriate, until the department's course of action is determined. Once this is determined the published report should be updated to explain the issue and the department's response.
- 7) That the department consider whether cost recovery of the Independent Observer program should be incorporated into the general cost of regulation.

7 Accredited stockpersons

Stockpersons' purpose and role

Stockpersons are widely acknowledged as a critical part of the on-voyage management of livestock. They have significant responsibilities for managing the health and welfare of livestock, working closely with the ship's crew, vessel masters and, if present, with the Australian Government accredited veterinarians (AAV). If the voyage does not require a shipboard AAV the stockperson is responsible for daily and end-of-voyage reporting under ASEL. Stockpersons are employees or contractors of the exporter and act under their direction and instruction.

The exporter is accountable for the stockperson's performance of their role, including meeting ASEL requirements. Accordingly, if a breach is identified that involves regulatory action this action would be against the exporter. AAVs have the same obligations as exporters for the performance of contractors and employees in meeting obligations under the legislation. However, they also have separate obligations and regulated accreditation with the department and with professional bodies.

The requirement for an accredited stockperson onboard was an outcome of the Keniry Review and the subsequent development of ASEL. Stockpersons are required to be accredited, with this accreditation being managed by LiveCorp (a not-for-profit industry body funded through statutory levies collected from livestock exporters) as a service to industry. Section 6.4 of the *Australian Position Statement on the Export of Livestock* describes the role of stockpersons:

LiveCorp-accredited stockpersons are employed by the exporter as outlined in the Standards and are responsible for reporting on the health, welfare and mortalities of livestock during the export voyage in the absence of an AQIS accredited veterinarian (ASEL 2011).

Accredited stockpersons are required to accompany each consignment of livestock and are responsible for the livestock husbandry on the vessel. To become accredited, a stockperson must undertake a 4-day training course run by LiveCorp that covers:

... all aspects of shipboard care and management of livestock with an emphasis on sheep and cattle. Topics include: adapting to life and work on board, animal handling, restraint and treatment, detection, diagnosis, treatment and prevention of shipboard diseases, feed, water and deck management, euthanasia, safety, crisis management (LiveCorp 2015).

Participants who pass course assessment requirements are awarded a provisional accreditation. Full accreditation is only given after the completion of 2 livestock voyages by sea where competency is assessed. Stockpersons are not regulated by the department.

Monitoring and reporting

Australian Government legislation states that a daily report of livestock consignment conditions onboard, from loading to disembarkation, are recorded every day. Legislation also mandates an end-of-voyage (EOV) report. If a shipboard AAV is not legislatively required to accompany a livestock consignment, daily reports and the EOV report must be provided to the exporter and

the department by the accredited stockperson. ASEL S5.12 and S5.13 specify when and to whom a daily report and EOVR report must be submitted. The daily report must include the information outlined in [Appendix D](#) and the EOVR report must contain the information detailed in [Appendix E](#). Daily reports and the EOVR report must be provided by the AAV or accredited stockperson for voyages of 10 days or more, voyages to the Middle East, maiden-vessel voyages, new exporters with their first livestock consignment, voyages deemed by the department to be high-risk, and consignment specific voyages. For voyages of less than 10 days, only an EOVR report by the AAV or stockperson is required to be submitted to the department, unless daily reports have been requested.

ASEL version 2.3 S5.11 specifies the monitoring and reporting required, including reporting requirements for a notifiable incident (particularly mortalities, factors that may have contributed to the deaths, and the current location of the vessel). Daily and end-of-voyage reporting is administered by the department.

Conclusion

Stakeholders emphasised the pivotal role stockpersons play in managing animal welfare outcomes on export voyages. This covered all stock management issues that occurred on a voyage. One of the most significant elements is the interaction between the stockperson and the crew. The review was advised that experienced and competent stockpersons are crucial for facilitating good animal husbandry and health care outcomes on voyages. However, they are in relatively short supply due to uncertainty and logistical difficulty of the work, availability and access to advanced training, few career progression opportunities and a lack of financial reward for higher or advanced experience and skills. These are largely matters for industry.

The effort needed to meet the department's monitoring and reporting requirements should match the desired outcomes. Daily monitoring and reporting requirements are necessary to help the work of stockpersons, particularly when active risk mitigation or response is required to reduce the risk of harm to livestock during voyages.

This report outlines recommendations about digital devices, applications, automated environmental monitoring equipment and CCTV equipment that are relevant to stockpersons. These approaches have the potential to provide useful information to the stockperson in performing their duties and reduce the amount of time they need to devote to this task, particularly if it distracts from actively managing livestock conditions.

Where no AAV is present, stockpersons are required to make judgements about animal health and decisions on treatment or euthanasia. They must also record and report reasons. The AAV Working Group submission highlighted an issue in this regard stating:

There is a large educational gap between AAVs and Stockpersons, AAVs are scientists and trained in scientifically taking observations. This difference has an effect on the data and information that is collected, and what can be reported. It is unclear if the difference in skill level is recognised by the department and whether the department interprets what is reported accordingly. For example, in Australia it is an act of veterinary science, regulated by the state and territory governments, to diagnose animal diseases (AAV submission 2019).

Stockpersons must receive appropriate training. The required reporting must not exceed their expertise or be utilised or interpreted beyond the level to which their diagnoses can be reasonably relied upon. The department should work with professional bodies such as the Australian Veterinary Association and AAVs to refine the categorisation and guidance for stockpersons in attributing a treatment or reason for euthanasia, to ensure reporting requirements align with their skills and expertise.

The department can support stockpersons to achieve high levels of voluntary compliance in a number of ways, including engagement in developing improved guidance and training. Voyage-specific debriefs and issue-based forums can provide useful information from experienced practitioners to improve regulatory practice, risk management, sharing of good practice and deriving useful industry intelligence.

Quantitative and qualitative data standards, guidance and training are also important. Qualitative assessment of animal health and welfare involves a level of subjective judgement that could lead to differences in assessment, even between qualified veterinarians. Supporting stockpersons—through relevant guidance and training in the requirements to keep records, monitor and report—is an important aspect of encouraging voluntary compliance.

Recommendation

- 8) That the department work with LiveCorp and industry to update training for stockpersons, particularly in relation to monitoring and reporting. The department should consider the utility of establishing a stockperson network.

8 Australian Government accredited veterinarians

Australian Government accredited veterinarians' role

Australian Government accredited veterinarians (AAVs) are contracted or employed by the exporter and are responsible for delivering veterinary treatments to livestock prepared under the exporter's AEP. The livestock must be prepared in accordance with relevant national and international importing country requirements. AAVs are accredited under section 4A of the Export Control (Animals) Order 2004. They are required to keep records as part of their accreditation as an AAV and to demonstrate compliance with the exporter's AEP and ASEL. Where an AAV is required on a voyage, they are also responsible for meeting the ASEL reporting requirements on health, welfare and mortalities.

AAVs are required to work with the stockperson, vessel master and crew to maintain the health and welfare of the animals onboard. ASEL requires a daily meeting between the vessel master (or representative), stockperson and the AAV to discuss animal health and welfare issues.

The department's website details the steps needed in the AAV accreditation process. To apply for accreditation a veterinarian must:

- be registered by a state or territory veterinary surgeons board in the state in which they intend to conduct export work
- have successfully complete the initial Animal Health Australia Accreditation Program for Australian Veterinarians (APAV)
- have successfully completed the Animal Health Australia online AAVet course (separate to the APAV program).

AAVs can be shipboard or land-based. The role of the shipboard AAV is within the scope of this review. Under ASEL version 2.3, they are responsible for the monitoring and reporting to the department of consignment conditions onboard a vessel from loading to disembarkation.

On 20 August 2003 a shipment of 58,000 sheep aboard the MV Cormo Express was rejected by Saudi Arabia due to scabby mouth disease. On 24 October 2003, the sheep were finally unloaded in Eritrea after being rejected by more than 30 countries. Almost 6,000 sheep died onboard. Following this incident, the Keniry Review recommended that veterinarians accompany all long haul voyages to the Middle East and be responsible for reporting. It stated 'the department requires exporters to have a shipboard AAV accompany consignments in the following circumstances:

- if the vessel is travelling to or through the Middle East
- if the vessel is new (or recently renovated)
- if the consignment is the first consignment for this particular exporter (Keniry 2003).

The department may direct exporters, on a case-by-case basis, to have a shipboard AAV accompany consignments if:

- the vessel has undergone a dry dock repair, or has had recent mechanical issues which has the potential to impact animal welfare
- exporting livestock to a new market
- the export consignment contains goats
- there was a reportable mortality incident on a previous shipment
- the voyage length may be unusually long (for example, under an extended voyage management plan) (Department of Agriculture and Water Resources 2016).'

Discussion

Stakeholders consistently raised the importance of the role of AAVs. Their experience and professional qualifications were relied upon and highly valued by exporters, stockpersons and vessel masters. AAVs and exporters indicated that their work was not only important on a particular voyage, but also often contributed to the improvement in approach and practices by exporters through feedback and recommendations from lessons learned.

Stakeholders raised a range of issues in relation to AAVs, including those raised with the Moss Review regarding the inherently conflicted role. The primary concern was that some AAVs who either reported animal welfare issues on a voyage, or sought to, had it made clear to them that they would not continue to receive work from the exporter or in the industry. This was consistently raised by a number of stakeholders and has the potential to undermine the integrity of the reporting framework.

Stakeholders also identified variations, inconsistencies and anomalies in AAV reports they obtained and analysed.

AAVs also raised concerns about the lack of engagement and feedback on reports they had provided, and perceptions of poor utilisation of information in reports to inform industry or regulatory improvement. AAVs were concerned that their experience and expertise was significantly underutilised. They also raised the issue of the level of engagement with them as a group on generic issues, or individually in response to incidents or voyages.

The role of the shipboard AAV is challenging due to the unique vessel environment, lack of diagnostic equipment, lack of veterinary medications (compared to a veterinary clinic), rudimentary tools, logistical issues and inherent risks of the trade. The department, in consultation with experienced AAVs and with professional bodies such as the Australian Veterinary Association, should consider how to establish training, ongoing support and a mentoring system for less experienced AAVs. Because the role of shipboard AAVs is so isolated, new AAVs need to be prepared to handle a range of situations quickly, and have advice readily available from a more experienced veterinarian if required. Some exporters indicated that they had arrangements in place to provide this support.

Conclusion

AAVs on voyages provide a critical professional service to exporters for the health and welfare of their livestock. AAVs are qualified veterinarians that are registered, and governed, in their

profession by state and national bodies. They must achieve and maintain accreditation under part 4A of the Export Control (Animals) Order 2004.

AAVs on voyages monitor livestock health and administer treatments, diagnose, or euthanise, where health issues are identified. They also monitor livestock health and welfare, and advise the exporter, vessel master, crew, and stockpersons on risks to welfare and mitigation or prevention responses. AAVs have legal obligations for monitoring and reporting.

Concerns about the nature of the relationship between AAVs and exporters has been explored in previous reviews into the industry. The Moss Review recommended that the department require AAVs to make an annual declaration of any personal conflict of interest, mainly in relation to interests or ownership of registered premises or animal production. The review also heard from a range of stakeholders expressing concerns about potential conflicts of interest.

This review does not consider that there is a conflict of interest in the engagement of AAVs by an exporter to provide professional veterinarian services in the care of their livestock. However, there is a potential conflict of interest between an AAVs engagement by an exporter and the AAVs monitoring and reporting obligations.

The department's regulatory approach should ensure that the commercial, regulatory and reputational business risks and costs are clearly borne by the exporter. The department should be cautious about the potential for risks to be transferred (for example, through managing a third party or government AAV service) and for such an arrangement to interfere with the often long-standing professional relationships between individual AAVs and exporters that many exporters valued as a critical part of continuous improvement in their business.

The principles of supporting voluntary compliance, detecting non-compliance and taking appropriate action apply to the department's regulatory role in relation to AAVs. This means making AAV monitoring and reporting obligations easy to understand and implement. AAV monitoring and reporting obligations should be aligned with the information that AAVs need to assess and respond to onboard conditions and report to exporters. This ensures the effort involved contributes to the outcomes being sought rather than potentially distracting effort away from optimising health and welfare.

AAVs have noted the complexity of existing requirements and obligations, including the plethora of export advisory notices in addition to ASEL, other guidance and legislation. Shipboard AAVs also have specific contractual requirements with the exporter, including instructions provided under the exporter's AEP.

The department should ensure that AAVs, and any regulated party, can easily access and understand their obligations. To encourage and support voluntary compliance, the department should establish a coherent, regularly updated resource package that draws together existing requirements and obligations and targets industry participants. Increasing the quality of guidance, accreditation, equipment and training materials are all important elements for supporting AAVs to meet their obligations.

A compliance-monitoring regime for AAVs is the other important element of the department's regulatory role. This regime aims to detect and respond to non-compliance, and create a risk or consequence framework that drives good behaviour and creates a level playing field. The

department should consider an approach to detecting and taking firm action on exporters or vessel masters that seek to compromise AAV reporting. Despite the consistent allegations that some AAVs are not meeting their obligations, there is very little evidence of investigations and sanctions. The simplest way of restoring confidence and reducing concerns is to increase the visibility of regulatory monitoring of AAVs, and to take firm action where poor behaviour is evident.

AAVs provide valuable knowledge and experience to help the department to improve both regulatory practice and industry welfare and health approaches. Working with AAVs as part of a co-design approach to monitoring and reporting is likely to be a cost-effective way of improving regulatory practice (noting that co-design does not mean that other important perspectives are not included in the final design). The recent initiative of the department to debrief AAVs following voyages is an important way of supporting them in their role and gaining intelligence.

Recommendations

- 9) That Australian Government accredited veterinarian training, and monitoring and reporting obligations be updated and clarified with improved guidance and support material and advice.
- 10) That Australian Government accredited veterinarians are accessed as a professional group to contribute to industry co-design of relevant monitoring and reporting standards and formats.
- 11) That the department support Australian Government accredited veterinarian forums, in addition to debriefing individual veterinarians after voyages, that allow the exchange of information, knowledge and experience of effective approaches to managing onboard risks between veterinarians and with the department.
- 12) That the department develop a risk-based compliance monitoring program for Australian Government accredited veterinarians, including a firm approach to escalating sanctions, to support good performance and a level playing field.

9 Vessel masters

The vessel master has an overriding obligation for the safety of the vessel and all those onboard. For livestock export voyages the vessel master also has an overarching responsibility for the management and care of the livestock. For voyages of this nature ASEL (version 2.3) states that:

The Master of the Vessel assumes overall responsibility for the management and care of the livestock during transport on the vessel (ASEL 2011).

The vessel is either contracted or owned by an exporter. Irrespective of the commercial arrangements in place, it is reasonable for the department to hold the exporter (as the licence holder) accountable for the livestock export activity outcomes of the voyage. Exporters can provide their instructions for the conduct of their export activity through the contractual, instruction or employment arrangements—including to the vessel master.

The vessel master is responsible for developing the load plan with information provided by the exporter to ensure the vessel's stability, and to meet any of the exporter's requirements. The vessel master is responsible for ensuring this is carried out in accordance with the requirements of ASEL (version 2.3), Marine Order 43 under the *Navigation Act 2012*, the International Convention of the Prevention of Pollution from Ships (MARPOL) 1973 and the International Convention for the Safety of Life at Sea (SOLAS) 1974.

Marine Order 43 (Cargo and cargo handling—livestock) 2018 (MO43), sets out the legal obligations of the vessel master in relation to livestock. Under division 15 of MO43 the vessel master must provide a report to the department and Australian Maritime Safety Authority (AMSA) when a voyage carrying livestock exceeds 24 hours. This report is known as the [Master's report: carriage of livestock](#).

These reports are an important accountability element in AMSA's regulatory framework. They are also viewed as a useful transparency measure. This is because they underpin the Minister for Agriculture's 6-monthly reports to parliament on live exports and are linked to the department's publication of investigations and actions taken in response to notifiable incidents. The reports may also provide an integrity measure as anomalies between this report and daily or EOVS reports may indicate a systemic issue that needs to be corrected.

The issues discussed under [Data quality, standards and analysis](#) are equally as valid for vessel master reports. Standardisation and industry co-design of reporting formats and channels should be progressed so that vessel master reports contribute to a data set that has the quality and accessibility necessary to support sound analysis, and that the reporting task is as efficient as possible. Information technology-based reporting frameworks provide an opportunity for this method of reporting and can contribute to high levels of voluntary compliance by making it easy to comply and hard to inadvertently enter incorrect information.

The department and AMSA have complementary regulatory roles for voyages. Moss (2018) recommended:

that the department and the Australian Maritime Safety Authority, in their respective regulatory roles, develop and maintain a collaborative relationship for the effective regulation of live animal exports (recommendation 29).

The department considered this recommendation to be complete (Department of Agriculture 2019a). Collaboration initiatives that have been put in place by the department and AMSA are useful. However, there are likely to be significant opportunities for closer collaboration in joint investigations of incidents and in pro-active regulatory operations as discussed in [Best practice regulation](#). Collaboration of this nature would also align with Moss Review recommendations 5, 7, 9, and 10. To respond to [recommendation 2](#) of this report, the department should continue to collaborate with AMSA and expand this to include collaboration on pro-active regulatory projects.

Appendix A: Department of Agriculture, Water and the Environment response



Australian Government
Department of Agriculture,
Water and the Environment

Ref: xxx

Mr Ross Carter
Inspector-General of Live Animal Exports
Department of Agriculture, Water and the Environment
GPO Box 858
CANBERRA ACT 2601

via email: iglae@agriculture.gov.au

Dear Mr Carter

Thank you for providing your draft report on *Monitoring and reporting during livestock export voyages* to me on 5 February 2020, and for providing the opportunity to respond to your findings.

As you have identified, the department has made significant progress in implementing recommendations from the 2018 Moss Review. This has improved regulatory culture and practice within live animal export regulatory areas and ensured the department is taking a strong evidence-based approach to regulation and standard-setting. The department has improved its internal and external communications and is increasingly introducing risk-based approaches into its work.

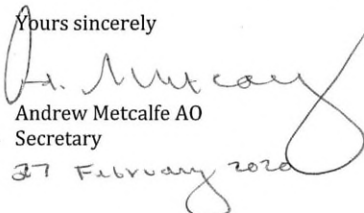
The department agrees that there are further opportunities to improve our regulation of live animal exports. In this respect, your first report provides a useful set of broad observations and specific recommendations to guide us in this work. As our sophistication around data use improves, the department will be able to move to more responsive regulatory approaches.

Consistent with your findings, the department has a number of projects either under way or scheduled to commence in the second half of the year in areas such as Approved Arrangements, regulatory transparency, and reform of Australian Accredited Veterinarians and independent observers. Many changes require longer-term timeframes to deliver and have a number of dependencies with respect to other reforms, including the development of new improved information technology systems.

Of course constraints on resourcing through cost recovery arrangements provide a challenge to completion of many projects within short time frames. The department has recently opened consultation on a proposed new structure for cost recovery for live animal exports which are designed to help address the structural under-recovery in the Live Animal Export Arrangement and ensure adequate funding for regulation of a sustainable industry over coming years.

In relation to your recommendations, I have provided a detailed response at Enclosure 1.

Yours sincerely



Andrew Metcalfe AO
Secretary
31 February 2020

Enclosure 1: Department of Agriculture, Water and the Environment response to recommendations from the Inspector General of Live Animal Export's Review report no. 2019-20/01: Monitoring and reporting during livestock export voyages

RESPONSE TO RECOMMENDATIONS FROM THE INSPECTOR GENERAL OF LIVE ANIMAL EXPORT'S REVIEW REPORT NO. 2019-20/01: MONITORING AND REPORTING DURING LIVESTOCK EXPORT VOYAGES

Department of Agriculture, Water and the Environment

February 2020

| # | Category | Recommendation | Response |
|---|--------------------------------------|--|---|
| 1 | Data quality, standards and analysis | <p>That the department develop a data quality and management strategy that:</p> <ul style="list-style-type: none"> a) adopts the Australian Government's quantitative data standards b) includes actions to develop detailed guidance and training resources for all qualitative data to reduce subjectivity c) uses co-design to develop electronic report formats that increase standardisation and support data upload for analysis d) supports clear, accurate and efficient reporting. | <p>Support in principle.</p> <p>The department recently established a Technical Analysis Team in the Animal Welfare Branch. It will continue to explore ways to standardise data and reporting to inform regulatory decisions, including developing guidance and training.</p> <p>Data collection, co-design of reporting format and qualitative data standards implementation will be subject to whole of department ICT system solutions and budgetary constraints.</p> |
| 2 | Data quality, standards and analysis | <p>That the department work with the Australian Maritime Safety Authority to require all vessels used in the live export trade to install automated:</p> <ul style="list-style-type: none"> a) CCTV cameras to record representative pens on all decks and any pens that have been identified as problematic b) wet and dry bulb temperature monitors at representative locations on each deck and on the bridge c) data loggers that can provide monitored data to those onboard in real time and that retain data records in a verifiable form for compliance purposes. | <p>Support in principle.</p> <p>The department agrees with the benefits of utilising automated solutions to guide standards development and to support regulatory decisions. Data loggers have been mandated on sheep voyages during the northern summer shoulder periods.</p> <p>It will continue to work with the Australian Maritime Safety Authority to explore opportunities to, where possible, implement automated approaches to data and information collection.</p> |

| # | Category | Recommendation | Response |
|---|--------------------------------------|--|--|
| 3 | Data quality, standards and analysis | That the department increase the resourcing and capability of the Technical Analysis Team in both statistical analytical expertise and epidemiological expertise. This analytical capability should include expertise in identifying other areas of risk such as participant behaviour, drivers and asset performance (for example, vessels, decks and pens). | <p>Support in principle.</p> <p>The department recognises the value of the Technical Analysis Team and the need to upskill staff across the Division in digital literacy and invest in epidemiological expertise. The development of these capabilities has been a focus since the Moss Review.</p> <p>The department agrees with using data to support evidence-based regulatory decisions. Subject to resource constraints, the department will continue to explore how it can invest in its data analysis and epidemiological capabilities.</p> |
| 4 | Livestock exporters | <p>That the department reframe approved arrangements for exporters to:</p> <ol style="list-style-type: none"> deliver the benefits of streamlined documentation and approval processes incorporate characteristics and indicators of dynamic risk management as a requirement of exporters operating under their approved arrangements ensure that demonstrating dynamic risk management by an exporter is an enforceable requirement design and undertake unannounced and targeted regulatory projects aimed at detecting poor dynamic risk management. | <p>Support in principle.</p> <p>The department supports the need to reframe approved arrangements. In 2020, the department plans to commence a review of Approved Arrangements.</p> <p>New powers will be available to the department if the <i>Export Control Bill 2019</i> is passed. Work to implement this will develop guidance to whole of department compliance approaches, which may also influence how Approved Arrangements are regulated.</p> <p>The department is continuing to develop approaches to verification audits, to be implemented later this year, and will take into account the need to detect poor dynamic risk management as part of this project.</p> |
| 5 | Independent observers | <p>That Independent Observers be deployed as part of a risk-based compliance monitoring program that includes:</p> <ol style="list-style-type: none"> targeting of industry participants based on analysis, intelligence and the nature of voyages (with an element of random targeting) | <p>Support.</p> <p>In October 2019, the department revised its approach to the deployment of independent observers (IO) so that it no longer requires IOs on all low-risk short-haul voyages.</p> |

| # | Category | Recommendation | Response |
|---|-----------------------|---|---|
| | | b) a proportion of Independent Observer deployment occur as part of integrated audit and inspection projects. | <p>In November 2019, the department released a consultation paper that discussed how it could move to a more sophisticated approach for the deployment of IOs.</p> <p>The department is reviewing submissions to the consultation paper to guide an updated IO deployment policy as well as evaluate the change in policy since October 2019.</p> <p>The Technical Analysis Team within the Live Animal Export Division currently performs analysis of voyage data to support risk-based regulatory activities.</p> <p>Greater resourcing and data capability development is required (as per recommendation 3), to enhance analysis and targeting of risk areas.</p> <p>The Animal Welfare Branch is also introducing system verification activities across the livestock export supply chain. Random auditing of consignments will feature in this work.</p> <p>The department will consider how Independent Observer deployment can also be incorporated into verification activities.</p> |
| 6 | Independent observers | That Independent Observer summary reports be published within a service-level commitment period after the conclusion of a voyage. Any matters under further investigation should be noted. Details of matters under investigation may be excluded, as appropriate, until the department's course of action is determined. Once this is determined, the published report should be updated to explain the issue and the department's response. | <p>Support.</p> <p>The department will review its procedures for processing Independent Observer Reports with a view to establishing a timeframe within which summary reports will be published after the conclusion of a voyage. It will finalise this review and will update the livestock client standards by July 2020.</p> |
| 7 | Independent observers | That the department consider whether cost recovery of the Independent Observer program should be incorporated into the general cost of regulation. | <p>Support.</p> <p>The department will explore cost recovery considerations for the Independent Observer Program in the broader context of current whole of department cost recovery activities.</p> |

| # | Category | Recommendation | Response |
|---|--|--|--|
| | | | A proposed approach to cost recovery of the whole program, including a division between levies and direct charging, was discussed with industry representatives on 26 February 2020. |
| 8 | Accredited stockpersons | That the department work with LiveCorp and industry to update training for stockpersons, particularly in relation to monitoring and reporting. The department should consider the utility of establishing a stockperson network. | <p>Support</p> <p>The department will work with LiveCorp and industry when LiveCorp updates this training.</p> <p>This will include support to review and update the LiveCorp Shipboard Stockperson Training Course and industry education sessions (in the form of teleconferences, workshops and/or webinars) on the Australian Standards for the Export of Livestock (ASEL) version 3, with a focus on monitoring and reporting requirements.</p> <p>The department will liaise with industry to investigate establishing a stockperson network.</p> |
| 9 | Australian Government accredited veterinarians | That Australian Government accredited veterinarian training, monitoring and reporting obligations be updated and clarified with improved guidance, support material and advice. | <p>Support.</p> <p>In August 2019, the department began implementing debriefs with ship board AAVs following each voyage.</p> <p>The department is establishing regular meetings/teleconferences with a highly engaged working group of AAVs.</p> <p>The department will also hold an AAV workshop in Adelaide in March 2020. The workshop will discuss training, monitoring and reporting obligations.</p> |

| # | Category | Recommendation | Response |
|----|--|--|---|
| 10 | Australian Government accredited veterinarians | That Australian Government accredited veterinarians are accessed as a professional group to contribute to industry co-design of relevant monitoring and reporting standards and formats. | Support. Regular engagement with AAVs via the AAV Working Group will provide a forum to access AAV expertise when designing monitoring and reporting standards and formats. |
| 11 | Australian Government accredited veterinarians | That the department support Australian Government accredited veterinarian forums, in addition to debriefing individual veterinarians after voyages, that allow the exchange of information, knowledge and experience of effective approaches to managing onboard risks between veterinarians and the department. | Support in principle. Given AAVs are dispersed across Australia, the department will work with the recently establish AAV Working Group to confirm the best format for a forum to exchange information. |
| 12 | Australian Government accredited veterinarians | That the department develop a risk-based compliance monitoring program for Australian Government accredited veterinarians, including a firm approach to escalating sanctions, to support good performance and a level playing field. | Support in principle. The department is developing its conflict of interest policy for AAVs which will include an audit schedule. |

Appendix B: List of submissions

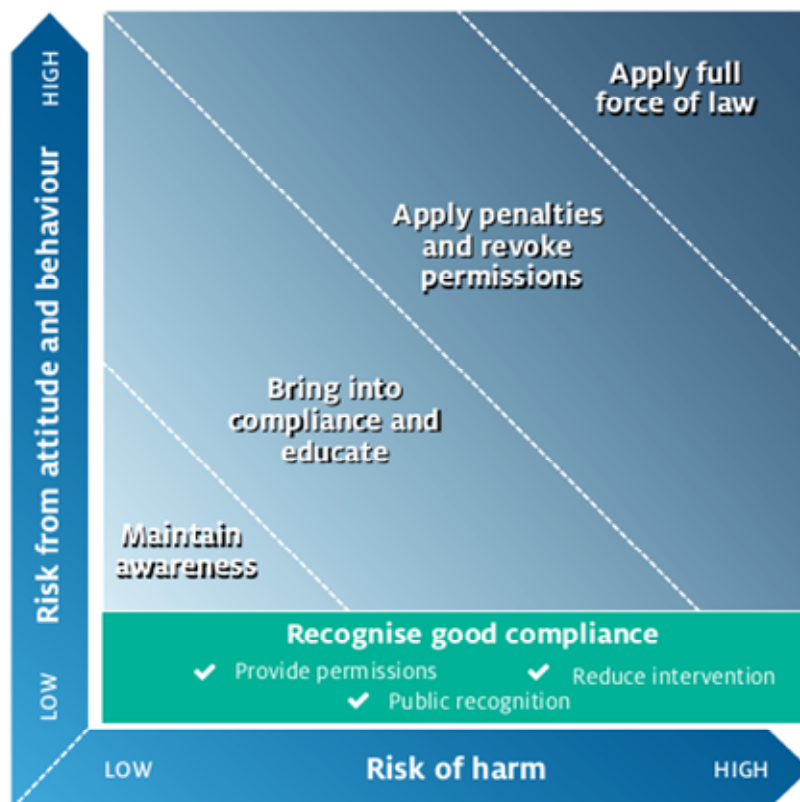
The review team were provided submissions from the following organisations, groups and individuals. To respect their privacy, those who listed their submissions as confidential have not been identified:

List of Submissions

| Name of organisation | Type of organisation |
|---|-----------------------|
| Australian Government accredited veterinarian Working Group (AAV Working Group) | Veterinary |
| Australian Livestock Exporters' Council (ALEC) | Exporter and industry |
| Australian Rural Exports (AUSTREX) | Exporter and industry |
| Australian Veterinary Association | Veterinary |
| Dr Richard Sutherland | Veterinary |
| LiveCorp | Industry |
| Northern Australia Live Export Working Group | Exporter and industry |
| Pastoralists & Graziers Association of Western Australia | Exporter and industry |
| RSPCA Australia | Animal welfare |
| Vets Against Livestock Exports (VALE) | Veterinary |

Appendix C: Department of Agriculture, Water and the Environment's Compliance Response Model

FIGURE 2 Our proportionate compliance response model



Source: Department of Agriculture

Appendix D: Daily report

Section 5.12 and Section 5.13 of the ASEL specifies when and to whom a daily report and EOVR report must be submitted. Daily reports and the end of voyage report must be provided by the AAV or accredited stockperson for voyages of 10 days or more, voyages to the Middle East, maiden vessel voyages, new exporters with their first livestock consignment, voyages deemed high-risk by the department, and consignment specific voyages.

| Onboard management of livestock Appendixes | | Standard 5 Division 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|--------------------------|--------------|--------|--|--|---------|--|--|-------|--|--|-------|--|--|----------|--|--|---|--|--------------|-------|----------|-------|--------|-------|------|-------|---------|-------|--|-------|
| DIVISION 3 APPENDIXES | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Appendix 5.1 Daily reports to the Australian Government | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Commencing on day 1 of the voyage, the report must include the following information: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"> <thead> <tr> <th>Port of loading</th> <th>eg Portland</th> <th>eg Fremantle</th> </tr> </thead> <tbody> <tr><td>Cattle</td><td></td><td></td></tr> <tr><td>Buffalo</td><td></td><td></td></tr> <tr><td>Sheep</td><td></td><td></td></tr> <tr><td>Goats</td><td></td><td></td></tr> <tr><td>Camelids</td><td></td><td></td></tr> </tbody> </table> | Port of loading | eg Portland | eg Fremantle | Cattle | | | Buffalo | | | Sheep | | | Goats | | | Camelids | | | <table border="1"> <tbody> <tr><td>Veterinarian</td><td>.....</td></tr> <tr><td>Stockman</td><td>.....</td></tr> <tr><td>Vessel</td><td>.....</td></tr> <tr><td>Date</td><td>.....</td></tr> <tr><td>Day No*</td><td>.....</td></tr> <tr><td>Vessel's position and ETA at next port</td><td>.....</td></tr> </tbody> </table> | | Veterinarian | | Stockman | | Vessel | | Date | | Day No* | | Vessel's position and ETA at next port | |
| Port of loading | eg Portland | eg Fremantle | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cattle | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Buffalo | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Sheep | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Goats | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Camelids | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Veterinarian | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Stockman | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vessel | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Date | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Day No* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vessel's position and ETA at next port | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| * must be consistent with the day number used by the Master of the Vessel | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Standard 5 Division 3 | Onboard management of livestock Appendixes | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

- 1 Dry bulb temperature and humidity
 - One average recording for each deck, each day
 - Bridge temperature (ambient)
- 2 Wet bulb reading – per deck
- 3 Feed consumption – average per head
- 4 Water consumption – average per head
- 5 Health and welfare issues – sick pen report including medication and treatments
- 6 Respiratory character
 - 1 = normal
 - 2 = panting
 - 3 = gasping
- 7 Faeces - average for each cattle deck
 - 1 = normal
 - 2 = sloppy
 - 3 = runny diarrhoea
 - 4 = like sheep pellets
- 8 Issues from daily meeting
- 9 Mortality

| Mortality | Euthanasia | Natural causes | Species |
|------------|------------------|----------------|---------|
| Daily | | | |
| Cumulative | | | |
| 10 | General Comments | | |

Appendix E: End of Voyage report

Onboard management of livestock
Appendixes

Standard 5
Division 3

Appendix 5.2 End-of-voyage report to the Australian Government

This report must provide a general overview of the voyage, with mention of any specific issues relevant to the health and welfare of the livestock, and must include the following information:

-
- | | |
|---|---|
| 1 | Vessel name |
| 2 | Voyage number |
| 3 | Departure port(s) Date Total loaded, by species |
| 4 | Discharge port(s) Date Total unloaded, by species |
| 5 | Feed and water Access Maintenance issues |
| 6 | Environmental conditions Weather Temperature Humidity Ventilation Decks/bedding |
| 7 | Health and welfare of livestock Number of livestock born during the voyage Number of abortions Number of mortalities |
| 8 | Relationships with master/crew/accredited stock person/accredited veterinarian |
| 9 | Comments on discharge operations |
-

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