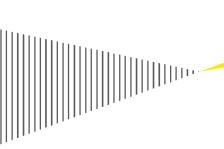
Economic analysis to inform LiveCorp's submission

Productivity Commission review into the regulation of agriculture







Ernst & Young
121 Marcus Clarke Street
Canberra ACT 2600 Australia
GPO Box 281 Canberra ACT 2601

Tel: +61 2 6267 3888 Fax: +61 2 6246 1500 ey.com/au

Sam Brown CEO, LiveCorp 1/40 Mount St North Sydney NSW 2060

16 March 2016

Economic analysis to inform LiveCorp's submission

Dear Sam

Thank you for the opportunity to prepare a report to assist with LiveCorp's submission in to the Productivity Commission's review into the regulation of agriculture. In accordance with our engagement agreement dated 28 January 2016, we are pleased to present you with the findings from our analysis.

To conduct the analysis of the costs and benefits related to the Export Supply Chain Assurance Scheme (ESCAS) we have drawn upon the publicly available information, stakeholder consultations with live exporters and information provided by LiveCorp. The report has been constructed based on information current as of March 2016, since this date, material events may have occurred since completion which is not reflected in the report.

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If you would like to clarify any aspect of this Report or discuss other related matters then please do not hesitate to contact me

Yours sincerely

Andrew Metcalfe AO Partner

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1. Executive Summary

1.1 Summary of costs and benefits of ESCAS

The key costs and benefits of the Export Supply Chain Assurance Scheme (ESCAS) are set out in Figure 1 below. On one hand ESCAS provides benefits to the community, industry and the government through alignment with the World Organisation for Animal Health (OIE) requirements through a single coherent regulatory system. On the other, the significant administrative and compliance costs, as well as the operation of the regulatory system place significant costs on the industry.

Figure 1 Summary of costs and benefits of ESCAS



1.1.1 Overview of benefits

- Australia's live export industry is valued at \$1.6 billion (2014-15)
- It generates employment for between 8,000 and 10,000 people per year, many in rural and regional areas, this also includes employment opportunities for Indigenous people in the northern Australian live export region
- 25 different business types are involved along the live export value chain
- There has been significant investment in training and infrastructure to build operator compliance capacity as a result of ESCAS (\$9.6 million invested in 2014-15)

Australia's livestock export industry is an important part of the Australian agricultural sector. In 2014-15, Australian live exports reached 3.7 million head (cattle, sheep and goats), valued at \$1.6 billion FOB. The livestock export industry and ancillary industries generate employment for

¹ LiveCorp and MLA (2015), Australian livestock export industry statistical review – 2014-15.

between 8,000 and 10,000 people per year, many in rural and regional areas.² The industry also provides employment opportunities for Indigenous people in the Northern Australian live cattle export region. Any disruption to the industry is associated with significant economic costs. These costs permeate the entire live exports value chain comprising around 25 different business types from producers, to transport providers and exporters. Due to the high concentration of the industry, the impacts of disruptions to the trade are most acutely felt by rural families and businesses in Western Australia, Queensland and the Northern Territory, where there is often a lack of alternative economic opportunities, particularly at the farm level.

ESCAS was implemented to reduce the industry's exposure to trade suspensions, and by doing so, increase the sustainability of the industry. Between 2011 and 2013, ESCAS replaced a number of measures with a single regulatory system to all importing countries. Since this time, there have been 22 instances of non-compliance recorded that may have had a negative animal welfare impact. Before the introduction of ESCAS, any significant welfare incident in the industry had the potential to impact on the entire market, as was seen with the suspension of livestock to Egypt in 2006 and Indonesia in 2011. ESCAS now allows for identification of facilities, supply chains or individuals for targeted compliance action as required, enabling trade with the market to continue.

At a more fundamental level, ESCAS seeks to ensure livestock are treated in line with the community's expectations and with the OIE animal welfare standards. To 30 November 2014, 8 million head of livestock in 1,139 consignments have been transported by 21 exporters to 18 markets assessed as meeting OIE animal welfare standards under ESCAS.³ In nine of these markets there were no incidents that impacted animal welfare, while in the remaining markets the incidents involved between an estimated 0.002 and 1.58 per cent of the animals.⁴

A large part of the successes ESCAS has had in this context may be attributed to significant investments in training and infrastructure made by industry and government. Since 2011-12, the Livestock Export Program (LEP) has provided standardised training programs to over 9,000 people working in off-shore supply chains. For many participants, this is the first time they will have participated in training and 'the recognition they receive for this training can be a powerful motivator of better treatment of animals'. In addition, a 'train the trainer' module is delivered, which aims to embed animal welfare training capability in the markets receiving Australian livestock.

The industry has also made significant investments in infrastructure improvements including port discharge ramps, installation of slaughter point infrastructure at abattoirs, and over \$2 million in research and development projects to build operator compliance capacity. In 2014-15 alone, investment by the industry totaled \$9.6 million.6 It is through this combination of industry initiative and government regulation that the Australian livestock exporting industry is helping to improve animal welfare globally.

⁵ALEC (2014), Submission into the Inquiry into Australia's trade and investment relationships with countries of the Middle East, p.8.

² Deards B, R Leith, C Mifsud, C Murrau, P Martin and T Gleeson (2014), *Live export trade assessment*, research by the Australian Bureau of Agricultural and Resource Economics and Sciences for the Live Animal Exports Reform taskforce, Department of Agriculture, p.viii.

³ Australian Government (2015), Exporter Supply Chain Assurance System Report, p.17

⁴ Ibid. p.51.

⁶ Includes \$7.4 million of exporter contributions through the LEP and an additional \$2.2 million invested by LiveCorp through its own programs.

1.1.2 Overview of costs

- It is estimated that government related costs and charges have increased from 18% of net receipts to 22% of net receipts for live cattle, and from 24% of net receipts to 29% of net receipts for live sheep
- ESCAS requirements create an additional \$22.3 million in regulatory burden on exporters comprising of administration costs (69%), substantive compliance costs (27%) and ESCAS charges (4%)
- 84 per cent of substantive compliance costs are fixed costs and 64 per cent of direct costs overall
 are fixed. This means that smaller exporters with smaller supply chains are currently bearing a
 disproportionate amount of the regulatory burden
- Anecdotal evidence suggests that a conservative 10 per cent reduction in delay costs could save exporters up to \$0.6 million per annum
- A reduction in the duplication of audits across shared facilities could lead to savings of around
 \$1.8 million per two-year cycle
- A reduction in the duplication of traceability systems across shared facilities could also lead to savings. For example, one exporter flagged the use of four different traceability systems in just one facility within Vietnam. With service fees for CCTV traceability systems quoted at around \$130,000 per year by the exporter, the savings in service fees from this one facility alone, could reach up to \$400,000 per annum

The benefits discussed could be brought with less direct and indirect costs to the industry. The regulatory costs of doing business in the live export trade are high. A review undertaken by ProAnd Associates in 2012 identified more than 175 local, state, national and international instruments associated with red meat and livestock production. Even before ESCAS, the review found that government related costs and charges were equivalent to 18 per cent of net receipts (i.e. receipts net of animal purchase costs) for live cattle exporters and 24 per cent of net receipts for live sheep exporters in 2008-09. If MLA estimates of the per-head costs of compliance with ESCAS are added, regulatory costs increase to around 22 per cent of net receipts for live cattle exporters and around 29 per cent of net receipts for live sheep exporters. 7

Analysis undertaken for this submission shows that ESCAS requirements create an additional regulatory burden on exporters of \$22.3 million per annum, roughly comprised of administration costs (69%), substantive compliance costs (27%) and ESCAS charges (4%). This does not include delay costs such as the lost income opportunities or standby costs of capital (e.g. demurrage) associated with the ESCAS application and approval process. While a single value could not be attributed to delay costs, anecdotal evidence suggests that a conservative 10 per cent reduction in delay costs could save exporters up to \$0.6 million per annum.

Quantifying the compliance costs associated with ESCAS was complicated by various cost sharing arrangements in place. A number of factors impact on an exporters ability to transfer costs down the supply chain including the maturity of the market, existing relationships with importers, and the exporter's market share. While there was some evidence of cost sharing (e.g. with respect to

⁷ This should not be used as a robust estimate of the total regulatory costs, but rather as an indication of the possible magnitude of the impact on exporters.

audits, infrastructure upgrades and maintenance), it was noted that this often comes at a cost to Australia's competitiveness relative to other countries that do not have ESCAS-equivalent requirements in place.

Since 2013, a number of changes have been implemented by the Department to reduce the regulatory burden to exporters associated with ESCAS. However, our interviews suggest that there is still room for improvement, particularly with respect to regulatory inefficiency and duplication. For example, an earlier study cited by this submission found that a reduction in the duplication of audits across shared facilities could lead to savings of around \$1.8 million per two-year cycle.

Likewise, a reduction in the duplication of traceability systems across shared facilities could also lead to savings. For example, one exporter flagged the use of four different traceability systems in just one facility within Vietnam. With service fees for CCTV traceability systems quoted at around \$130,000 per year by the exporter, the savings in service fees from this one facility alone, could reach up to \$400,000 per annum.

One of the benefits expected of quality assurance programs is the continuous improvement in processes and operations that usually accompanies participation in these programs. Over time, it would not be unrealistic to assume that this would lead to a reduction in risk across the live export industry. For example, if we assume that currently only 30 per cent of facilities are 'low risk' but that after three years under a quality assurance program this would increase to 60 per cent, this could lead to savings in audit fees of around \$1.6 million per annum for the industry.8

Perhaps most significantly, however, are the opportunity costs to trade for Australian exporters associated with ESCAS. In 2013, around 100 countries were engaged in the live exports trade. While all countries involved in the exportation of livestock are expected to adhere to OIE's animal welfare standards, only Australia regulates animal welfare standards right through to the point of slaughter in off-shore markets. This places the Australian sector at a competitive disadvantage.

ESCAS has been criticised for not being sufficiently flexible and, as a consequence, negatively impacting on trade opportunities for Australian exporters. In particular, it has been argued that the 'one-size-fits –all' approach of ESCAS does not allow for the strength of an importing country's regulations or improvements in the supply chains of exporters to be taken into account.

In other cases, ESCAS has been incompatible with traditional livestock sales and distribution systems, particularly in Saudi Arabia, where trade has been halted due to issues of sovereignty. Similar impacts have been experienced in Australia's exotic Awassi sheep trade with Kuwait. Averaging consignments of around 150,000 heads per annum in the pre-ESCAS period, trade has now slowed to around 50,000 sheep per annum. Selling at a premium of \$10 to \$15 in some Middle Eastern markets, this equates to a minimum revenue loss of \$1.0 million per annum. Moreover, while Singapore is referenced as a success story for ESCAS, the fact that Australia's market share has decreased by 50 per cent due to the uncertainty brought on by ESCAS is not often discussed.

Finally, there are concerns that ESCAS is not working as intended, particularly when it comes to the capacity of the regulator to respond to and manage incidents of non-compliance. By its very existence, ESCAS should provide the livestock industry with the confidence to proactively report and respond to incidents. However, concerns have been raised over the Department's consistency in applying non-compliance ratings and in how it applies regulatory action. The Department's wide

⁸ Calculations based on risk profile assumptions provided by LiveCorp (now and in three years).

by exporters of potential problems (only 31% of total reports made per annum).			

discretionary powers and lack of predictability in this respect, has led to sub-optimal self-reporting

1.2 Benefits

1.2.1 Increase in the stability of the live exports industry

ESCAS was introduced to allow trade to continue without the need for trade suspensions to entire markets, should animal welfare incidents occur of exported Australian livestock. As stated in a joint submission to the Exporter Supply Chain Assurance System Review (ESCAS Review) by the livestock industry, 'ESCAS allows for animal welfare incidents to be managed on a supply chain basis by identifying, isolating and fixing the issue without affecting other supply chains or the broader trade'.9

The costs to industry associated with trade suspensions are high. Previous disruptions to livestock exports from Australia provide some indication of the potential costs of a partial or complete cessation of trade. For example, in Western Australia the closure of the Saudi Arabian market for live sheep in 2003 caused an estimated immediate 50 per cent reduction of average wether (non-breeding male adult sheep) prices in Western Australia.¹⁰

A second study of the financial impacts of the cattle restrictions to Indonesia on the Northern Territory was conducted by Hydros Consulting in 2011. The study reported significant financial costs to producers including a drop in saleyard prices as a result of the redirection of livestock towards the domestic market; a reduction in property values by between 40 to 50 per cent as a result of increased uncertainty; and potential increases in interest margins by at least 2 per cent from banks. ¹¹ For rural families and businesses, many of whom operate with high levels of debt and are already working with tight margins; losses of this magnitude are unsustainable.

However, producers are not alone in bearing the financial burden of industry disruption. With many businesses reliant on the live exports industry, the downstream impacts of trade suspensions are equally significant. A study undertaken in 2000 identified up to 25 separate business types making up the livestock export industry value chain, each generating value added and employing people in both urban and regional Australia.¹²

A second study undertaken by the MLA in 2007 estimated the average dependence of participants in the livestock exports industry on the trade, as well as ancillary service providers. Clearly, service providers with a higher level of reliance on the livestock export trade are likely to be the most significantly impacted by a trade disruption to the industry. The results of this study are presented in Table 1.

⁹ALEC, Sheepmeat Council of Australia, Cattle Council of Australia, Goat Industry Council of Australia (2014), Submission by the Australian Livestock Industry to the Review of the Exporter Supply Chain Assurance System, p.21

Keniry, J. (chair), Rogers, W, Caple, I., Bond, M. and Gosse, L. (2003). Livestock Export Review: Final Report. A Report to the Minister for Agriculture, Fisheries and Forestry, p.15

¹¹ Hydros Consulting (2011), *The financial impacts of cattle export restrictions on producers and other stakeholders in Northern Australia*, report prepared for the Department of Agriculture Fisheries and Forestry

Hassall & Associate Pty Itd (2004), A quantitative and qualitative assessment of the value of the livestock export industry to the national economy, report prepared for Meat and Livestock Australia, p.1

Table 1 Value chain participants who benefit from live export - Northern West Australia

Value chain participant/ancillary service provider	Turnover earned from livestock export (%)
Exporters	>80
Cattle producers	>80
Assembly depot operators	>80
Marine consultants	>80
Ship owners	>80
Ship agents	>80
On-vessel stockmen	>80
Road transport providers	50 - 80
Livestock agents	50 - 80
Veterinary service providers	50 - 80
Port authorities	50 - 80
Stevedores	50 - 80
Rural contractors - mustering, fencing, etc	10 - 50
Rural consultants and trainers	10 - 50
Fodder growers and manufacturers	10 - 50
Industry associations	10 - 50
Providores	10 - 50
Regional businesses	<10
Government service providers	<10
Rural finance, auditing, insurance and legal service providers	<10

Source: MLA (2007), The Live Export industry: Assessing the value of the livestock export industry to regional Australia, p.31.

While the overall contribution of the livestock export industry to the Australian economy is small (equating to around 0.12% of GDP¹³), disruptions to the trade have significant adverse impacts at both the regional and farm gate level. Numerous studies have been done over the years attempting to quantify the impacts of a cessation (partial or full) to livestock exports (Table 2). According to these studies, the immediate impact of a cessation of livestock exports would be evident in a fall in prices as producers and processors adjust to the additional supplies available for domestic slaughter. The flow-on economic impacts are then measured as the decrease on the gross value of production (GVP) and employment on particular regions, states and for Australia as a whole.

¹³ Australian Livestock Exporters' Council (2014), Submission to the Australian Livestock Exporters' Council to the Agricultural Competitiveness White Paper, p.5

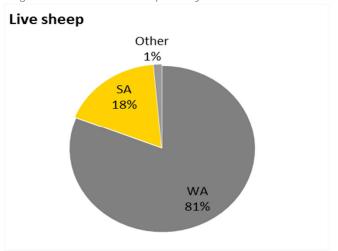
Table 2 Studies of short-term impacts of a cessation (partial or fill) of live export trade

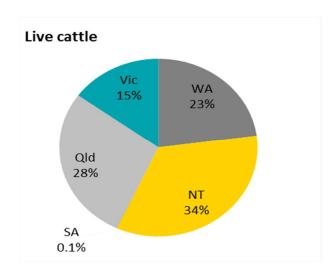
Paper	Timeframe	Industry	Region	GVP	Employment (FTE)
		Cattle	Northern WA	-\$135m	-388
	1 year after complete	Cattle	NT	-\$156m	-538
MLA (2007) ^a	cessation	Cattle	Qld	-\$266m	-221
	CC33ation	Sheep	Southern WA	-\$555m	-3614
		Cattle	Southern WA	-\$75m	-392
	1st year after 10% cessation	Sheep	WA	-0.014%	-0.006%
DAFWA (Aug 2011) ^b	1 year after 20% cessation	Sheep	WA	-0.028%	-0.013%
	1st year after 30% cessation	Sheep	WA	-0.041%	-0.019%
DAFWA (July 2011) ^c	1st year after complete cessation	Cattle	WA	-\$158m ^c	n.a.
CIE (2011) ^d	2005-06 to 2008-09	Red meat	Australia	-\$235m (-2.3%)	n.a.
CIE (2014) ^e	2008-09 to 2011-12	Wool	Australia	-41m (-1.6%)	n.a.

- [a] Meat and Livestock Australia July 2007, *The Live Export industry: Assessing the value of the livestock export industry to regional Australia.* Costs adjusted for inflation.
- [b] Department of Agriculture and Food Western Australia August 2011, Economic Importance to Western Australia of Live Sheep Exports.
- [c] Department of Agriculture and Food Western Australia July 2011, *Economic Importance to Western Australia of Live animal exports*. Costs adjusted for inflation.
- [d] The Centre for International Economics June 2011, *Contribution of the Australian Live Export Industry*. Costs adjusted for inflation
- [e] The Centre for International Economics March 2014, *Contribution of live exports to the Australian Wool Industry*. Costs adjusted for inflation.

Due to the high concentration of the live exports industry, the financial pain associated with a disruption to the trade would be felt most acutely in particular regional areas, where there is generally a lack of economic alternatives, particularly at the farm level. For example, in September 2015, around 85 per cent of total live cattle exports were loaded from the Northern Territory, Queensland, and Western Australia (Figure 2). For the same period, 81 per cent of live sheep exports were loaded from Western Australian ports (Figure 2).

Figure 2 Australian live exports by state





Source: MLA and LiveCorp (2015), LiveLink Live Export Statistics - December 2015.

Since ESCAS was implemented in 2011, there have been 22 instances of non-compliance recorded that may have had a negative animal welfare impact. He fore the introduction of ESCAS, any significant welfare incident in the industry had the potential to impact on the entire market, as was seen with the suspension of livestock to Egypt in 2006 and Indonesia in 2011. ESCAS now allows for identification of facilities, supply chains or individuals for targeted compliance action as required, enabling trade with the market to continue. He

Without knowing the extent to which each incident of non-compliance would have caused a disruption to trade, it is not possible to quantify this benefit. What we do know is that by reducing the industry's exposure to trade suspensions, ESCAS avoids many of the costs discussed, increasing the sustainability of the industry. Greater stability is also important to Australia's broader reputation as a reliable trading partner.

1.2.2 Greater alignment with community expectations and animal welfare standards

ESCAS seeks to ensure livestock are treated in line with the community's expectations and in accordance with OIE animal welfare standards. In particular:

- Exporters must demonstrate that their supply chain can meet OIE standards before they export livestock. This includes submission of independent audit reports.
- Once the supply chain has been established, exporters must continue to demonstrate that animals are treated appropriately, through performance auditing.
- For cattle and buffalo, the exporter is required to provide further reporting, through accounting and traceability declarations.

1.2.2.1 Greater alignment with community expectations

The welfare of exported livestock is becoming increasingly important within Australia. This is shown by the response of the Australian public to footage of mistreatment of Australian livestock in overseas markets in 2011 and by the increasing amount of legislation designed to address this. Between 31 May 2011 and 5 September 2011:

There were a total of 224 media inquiries to the Department of Agriculture, Fisheries and Forestry and 17,000 media items in Australian media (print, radio, TV) on livestock exports. The Australian Government has received over 150 000 pieces of correspondence (largely campaign emails) from individuals and organisations. There have been a number of public protests against the trade in livestock (Animal Australia's National Day of Action on June 18 2011 and RSPCA national rallies on 14 August 2011) and two private members' bills advocating the ban of the livestock export trade were introduced into the Parliament. ¹⁶

More recently, a survey of some 1,041 Australians in June 2014, found that:

The vast majority of Australians (86%) believe that the wellbeing of animals exported overseas

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 $^{^{\}rm 14}$ Australian Government (2015), Exporter Supply Chain Assurance System Report, p.17

¹⁵ *Ibid*, p.25

¹⁶ Department of the Prime Minister and Cabinet (2011), ESCAS Post Implementation Regulation Impact Statement, Department of the Prime Minister and Cabinet, Canberra, p11.

for food is important. Additionally, they are more likely to say that current laws for exported animals are "inadequate" than to say they are "adequate." In fact, of the various types of animals listed in the survey, animals subject to live export are considered the least protected.¹⁷

To date, the value to the Australian public of animal welfare outcomes associated with ESCAS has not been evaluated. However, an extensive literature exists on contingent valuation that aims to quantify existence of 'non-market goods'. Such studies show that benefits to the general public of non-market goods existing in farm animal welfare can be significant.¹⁸

1.2.2.2 Greater alignment with animal welfare standards

Since the implementation of ESCAS, Australian livestock have been exported to 866 facilities across 18 markets assessed as meeting OIE animal welfare standards under ESCAS. 19 In nine of these markets there were no incidents that impacted animal welfare, while in the remaining markets the incidents involved between an estimated 0.002 and 1.58 per cent of the animals Australia exported to those markets. 20

While it is difficult to identify exactly how and to what extent animals were actually impacted, we can use a number of indicators as proxies for animal welfare improvements. A study procured by Meat and Livestock Australia (MLA) in 2011 developed four key performance indicators (KPIs) and associated measures to evaluate the performance of the Livestock Export Program (LEP) against *livestock management and animal welfare*. The KPIs were:

- On-going improvements to handling and transport;
- Increasing understanding and capacity by management and staff of exporters, shippers and inmarket interests
- On-going improvements in facilities and infrastructure; and
- Demonstrated capacity to respond to incidents.²¹

The first three KPIs are addressed in the following discussion. The last KPI with respect to the capacity to respond to incidents is discussed in Section 1.3.3.

Ongoing improvements to handling

It is currently difficult to track improvements in the handling of animals. One indicator used by the ESCAS Review was the prevalence of pre-slaughter stunning in Indonesia before and after the introduction of ESCAS. The review cited a 2010 study, which noted that pre-slaughter stunning was rarely exercised in Indonesia at the time of the study.²² This was compared against ESCAS data between 2011 and 2013, which showed that 89.7 per cent of cattle exported to Indonesia had

 $^{^{\}rm 17}$ Human Research Council (2014), Animal Tracker Australia – Baseline Survey Results, p.2

See Bennett M and R.J.P Blaney (2003), Estimating the benefits of farm animal welfare legislation using the contingent valuation method, *Agricultural Economics*, 85-98. Nocella, G., Hubbard, L. and Scarpa, R. (2010) Farm animal welfare, consumer willingness to pay, and trust: results of a cross-national survey. *Applied Economic Perspectives and Policy*, 32(2), 275-297.Rolfe J. (1999), Ethical rules and the demand for free range eggs, *Economics Analysis and Policy*, Vol.29, Issue 2, 189-206.

¹⁹ Australian Government (2015), Exporter Supply Chain Assurance System Report, p.16

²¹ Stone G and J. Coutts (2011), *Measuring the key performance indicators of the Livestock Export Program*, report prepared by QualDATA for Meat & Livestock Australia

²² Caple, I, Gregory, N.G, Cusack, P, McGowan, P (2010), *Independent study into animal welfare conditions for cattle in Indonesia from point of arrival from Australia to slaughter*, report prepared for Meat & Livestock Australia, Sydney and LiveCorp, Sydney

been processed in facilities that used pre-slaughter stunning.²³ While this shows a correlation between the establishment of ESCAS and more pre-slaughter stunning, it doesn't necessary show a causal relationship between the two events. To address this challenge a joint project has been started by LiveCorp and MLA to develop animal welfare performance indicators.

Investment in infrastructure and training

The second and third indicators above are addressed together. Importers, exporters and governments have invested significantly in importing countries to increase the understanding and capacity of human capital engaged in the supply chain and to bring about continuous improvements in facilities and infrastructure. Without these investments any successes of the ESCAS to date would not have been possible. Indeed, funding for LEP alone increased by over \$2 million between 2009-10 and 2012-13 to support ESCAS related initiatives (Error! Reference source not found.). Importantly, the benefits brought to Australian livestock by these investments are shared by all local and imported facilities processed through the supply chains of Australian exporters.

Table 3 Annual LEP funding, 2009-10 to 2014-15

Year	LEP Budget
2009-10	\$5,905,000
2010-11	\$6,975,000
2011-12	\$7,423,000
2012-13	\$8,025,000
2013-14	\$7,317,000
2014-15	\$7,367,000

Source: Exporter Supply Chain Assurance System Report (2015)

Since the introduction of ESCAS, investment by the LEP has included:

- Development of training and calibration courses for ESCAS auditors²⁴
- Translation of ESCAS training materials, such as SOPs work instructions, training DVDs and training presentations into other importing country languages²⁵
- The provision of animal welfare training to 9,127 people working in supply chains, including to deliver improved animal handling and welfare, promotion of ESCAS requirements and OIE guidelines, and adoption of Standard Operating Procedures (SOPs)²⁶
- Over \$2 million in research and development projects to build operator compliance capacity; facility knowledge and understanding by importers; and increase the technical capacity of those involved in managing and administering the system²⁷
- Engagement of contractors that are employed or engaged by an Australian exporter within a nominal supply to review supply chains and provide recommendations on improvements; and develop systems and processes to assist importers to implement the ESCAS system²⁸

²⁶ LiveCorp (2015), *Annual Report 2014-15*, p.20.

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²³ Australian Government (2015), Exporter Supply Chain Assurance System Report, p.18

 $^{^{24}}$ Submission by the Australian Livestock Industry to the Review of the Exporter Supply Chain Assurance System, July 2014, p.33 $\,$

²⁵ *Ibid*, p.34

²⁷ *Ibid*, p.38

²⁸ *Ibid*., p.31

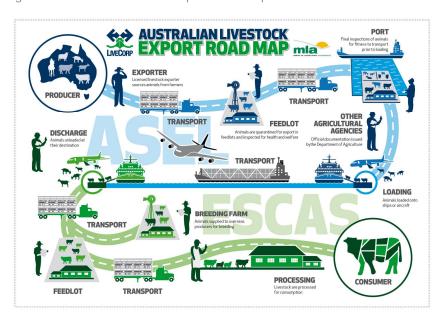
Infrastructure improvements 'including port discharge ramps; loading and unloading ramps at feedlots; repairs and maintenance to transport vehicles; improvements to feeding and watering systems in feedlots and; modification to lairage and improvement to, or installation of, slaughter point infrastructure at abattoirs'²⁹.

1.3 Direct costs

1.3.1 Regulation of animal welfare and livestock exports

The regulatory costs of doing business in the live exports trade are high (Figure 3). A review undertaken by ProAnd Associates identified more than 175 local, state, national and international instruments on red meat and livestock production. State and territory governments have primary responsibility and jurisdiction for enforcing their animal welfare legislation, which can vary quite significantly by jurisdiction. The Commonwealth Government in turn is 'responsible for export policy, regulation of livestock exporters, premises operators and Australian Government Accredited veterinarians, and undertakes activities including licensing livestock exporters, inspections of livestock prior to export, and issuing health certificates and export permits'. In 2015, the ESCAS Review identified 11 separate pieces of Commonwealth export legislation alone. On top of this, exporters must also comply with any importing country requirements. In the most part, these conditions relate to the health of the livestock. For example, some countries have animal health testing requirements; quarantine and transport requirements; and animal weight limits.

Figure 3 Australian Livestock Export Road Map



Source: LiveCorp

²⁹ *Ibid.*, p.28

³⁰ ProAnd Associates (2012), *Regulatory costs and assistance to the red meat and livestock industry*, prepared for MLA, p.6

³¹ Australian Government (2015), Exporter Supply Chain Assurance System Report, p.44-45.

³² Ibid

³³ Ibid

Even prior to the introduction of ESCAS in 2011, therefore, the regulatory burden on the Australian livestock export industry was already high. The report by ProAnd Associates analysed the costs and charges imposed on the industry in 2008-09 and acknowledged that the livestock export industry has been subject to increasing regulation, the result of which has been a significant increase in costs to exporters. The report found that regulation costs were equivalent to 18 per cent of net receipts (i.e. receipts net of cattle purchase costs) for cattle and 24 per cent of net receipts (i.e. receipts net of sheep purchase costs) for sheep.³⁴

1.3.2 Past reviews of direct ESCAS costs

ESCAS requirements impose significant compliance costs on both the Government and exporters. To comply with ESCAS, exporters are required to specify the supply chain to which they will be supplying animals and provide evidence of control; traceability or accountability; and assurance of the adequacy of the animal welfare arrangements This involves the preparation of a substantial amount of paperwork, including application documents, contracts or control arrangement documents, traceability procedures and audit reports of the proposed supply chain (Figure 4).

Figure 4 ESCAS APPLICATION & AUDIT PROCESS

ESCAS Application

- Details of supply chain
- Documents demonstrating control & traceability
- Independent audit of control, traceability & OIE animal welfare checklist

Approval of export consignment

• DoA reviews the audit reports and contracts before granting approval for export

Performance audit

•The auditor conducts a performance audit while the animals are in the supply chain to ensure control, traceability & OIE standards are being met.

Reporting

• At the completion of each shipment the exporter must provide DAFF with an end of process report, including performance audits.

³⁴ ProAnd Associates (2012), *Regulatory costs and assistance to the red meat and livestock industry*, prepared for MLA, p.35

The full costs associated with the ESCAS regulatory system have been previously estimated on two occasions. However, one study was based on an estimate of costs and the other on actual costs, yielding significantly different results. Moreover, while providing high level costs; neither study was able to place specific costs on specific compliance activities.

First in late 2011, the post-implementation regulation impact statement identified two sets of costs for exporters under ESCAS – a one-off implementation cost of \$0.5 million per exporter and ongoing costs of \$2 per animal for cattle exported to Indonesia.³⁵

A more recent industry study conducted in 2013-14, estimated a range of compliance costs from \$0.77 to \$13.0 per animal depending on the species and transportation method (Table 4). Based on these costs per head and the number of livestock exported in 2013-14, the total cost to exporters of complying with ESCAS can be estimated at \$13.2 million per annum.

Table 4 Cost of	compliance with	ESCAS from	the MLA	(2014) stud	У

Species	Transport method	\$/head (2013-14) ^[a]	No. animals shipped (2013-14) [b]	Total compliance cost (2013-14)
Cattle	Sea	\$9.00	1,131,322	\$10,181,898
Sheep	Sea	\$0.77	1,974,457	\$1,520,332
Sheep	Air	\$13.00	33,902	\$440,726
Goats	Air	\$13.00	81,167	\$1,055,171
			Total	\$13,198,127

[a] LiveCorp/MLA (2014), Development of a risk management and quality assurance program.

[b] MLA (2015), Australian livestock export industry statistical review

The compliance costs provided by the study are exclusively related to ESCAS and are industry-wide. In order to provide an indication of the extent of the broader regulatory burden on each exporter, Table 5 replicates the ProAnd Associates study. This study estimates the total regulatory costs to the livestock before ESCAS was introduced. Leaving all inputs and assumptions the same and including ESCAS, Table 5 shows that government-influenced costs and charges could account for up to 22 per cent of receipts net of animal purchases for live cattle exporters. For live sheep exporters, this increases to 29 per cent of net receipts.

Table 5 Update of ProAnd Associates study to include cost of compliance with ESCAS

Item	Cattle	Sheep
Descints from expert sales	\$96,000,000	\$125,000,000
Receipts from export sales	(100,000 head @ \$960/head)	(1,000,000 head @ \$125/head)
Animal purchase costs	\$61,500,000	\$66,000,000
Animai pur chase costs	(100,000 head @ \$615/head)	(1,000,000 @ \$66/head)
Receipts net of purchase costs	\$34,500,000	\$59,000,000
ESCAS-specific regulatory costs [a]	\$900,000	\$896,179
ESCAS-specific regulatory costs (5)	(100,000 head @ \$9.00/head)	(1,000,000 @ \$0.77 - \$13/ head)
Other government influenced costs	\$6,570,445	\$15,987,460
and chargers [b]	(based on escalated ProAnd costs)	(based on escalated ProAnd costs)
% regulatory costs of net receipts	22%	29%

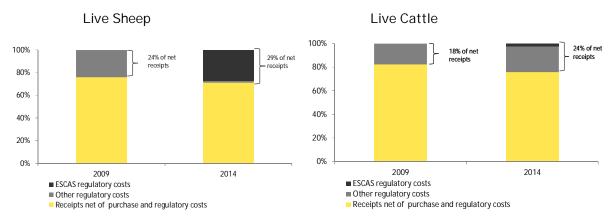
[a] LiveCorp/MLA (2014), Development of a risk management and quality assurance program

[b] ProAnd Associates (2012), Regulatory costs and assistance to the red meat and livestock industry.

³⁵ Department of the Prime Minister and Cabinet (2011), ESCAS Post Implementation Regulation Impact Statement, Department of the Prime Minister and Cabinet, Canberra

The increase over time is shown diagrammatically in Figure 5.

Figure 5 Proportion of regulatory costs of net receipts over time



[a] LiveCorp/MLA (2014), Development of a risk management and quality assurance program [b] ProAnd Associates (2012), Regulatory costs and assistance to the red meat and livestock industry.

While unable to provide a further break-down of the costs, the MLA study asked exporters to rank their top three most costly compliance activities associated with ESCAS. In order of importance, exporters identified five key groups of costs as having the highest cost burden: administration costs, audit costs, opportunity costs, ESCAS fees and delay costs.

Administration costs received both the most mentions (92%) and were ranked first most often (42%). In particular, exporters highlighted the significant costs associated with maintaining the traceability of animals within the supply chain. Audit costs followed, ranked in the top three by 75 per cent of respondents. Surprisingly, given the recent focus on the indirect costs of ESCAS, only 33 per cent of exporters mentioned the loss of market access or share. We suspect, however, that this may be a result of how the question was phrased.

Table 6 Most costly compliance activity as ranked by exporters, by key cost group

Rank	Administration costs	Audit costs	Lost trade opportunities	ESCAS fees	Delay costs
1	42%	33%	25%	0%	0
2	33%	25%	8%	8%	8%
3	17%	17%	0%	25%	0
Total	92%	75%	33%	33%	8%

Source: LiveCorp/MLA (2014), Development of a risk management and quality assurance program.

1.3.3 Breakdown of direct costs

In defining compliance costs, three key costs areas are typically identified – administrative costs; substantive compliance costs; and delay costs. We spoke to five exporters in the lead up to this submission to refresh earlier analysis undertaken by the MLA and to better understand each area of costs with relation to the ESCAS requirements. A summary of the self-reported costs escalated for 21 exporters and 866 facilities (latest population statistics for 2014-15 provided by the ESCAS Review) is provided in Table 7.

Table 7 Total costs of compliance with ESCAS by key cost area, per annum

Item	Total cost (\$million)
Administration costs	15.4
Substantive compliance costs	6.1
Delay costs	n.a.
ESCAS fees	0.8
Total	22.3

The costs shown are more than 50 per greater than those calculated on the basis of the earlier MLA analysis. We suspect that there are a number of factors behind this including a different methodology and population base. Moreover, at the time the earlier analysis was conducted, the costs of compliance with ESCAS had yet to be fully realised (i.e. due to the staged implementation of ESCAS). However, we note that due to the short timeframe for this analysis, we were unable to obtain costs from a representative sample of exporters, which will also be impacting on the variance in costs.

1.3.3.1 Administration costs

Administrative costs are defined as costs incurred in demonstrating compliance with regulations and include the costs associated with the engagement of independent auditors. In line with the earlier survey of exporters, administrative costs are the most costly compliance activity, representing around 69 per cent of total compliance costs (Table 8). This includes considerable costs in the preparation of documentation for the Department (\$0.8 million per annum) as well as costs related to the engagement of experts (e.g. translators and lawyers) to assist compliance with ESCAS (\$3.2 million per annum).

Table 8 Administration costs relating to ESCAS requirements, per annum

Item	Total cost (\$million)
Audit costs	6.8
Maintaining records of control and traceability	4.2
Engaging expertise to assist compliance with ESCAS	3.2
Engagement with auditors	0.4
Making, keeping or providing records required by the Department	0.4
ESCAS and variation applications	0.3
Preparation of investigation report for non-compliance incident	0.1
Total	15.41

The following discussion draws out some of the administration costs related to audit, traceability, and incidents of non-compliance.

Audit related costs

Audit related costs make up the majority of administrative costs per annum (44%), estimated to cost Australian exporters around \$6.8 million per annum. Apart from audit fees, this includes administration costs associated with coordinating and following up with auditors, reviewing and proofing audit reports, and invoicing. Audits are a key element of the ESCAS framework. They provide evidence of compliance with ESCAS requirements; both as part of exporter applications for new ESCAS supply chains and ongoing evidence that existing ESCAS arrangements continue to comply with regulatory requirements.

Since 2013, a number of changes have been implemented by the Department to reduce the regulatory burden to exporters associated with audits. This has included consolidating and

improving the auditor checklists. The Department has also implemented a risk-based framework for audits, whereby supply chain elements with an inherently lower risk of adverse animal welfare outcomes are subject to less frequent on-site audits.

Nevertheless, there is still room for improvement. The ESCAS Review recognised the changes described as important first steps in reducing unnecessary red tape. However, it identified a number of opportunities to further reduce cost burdens. This included 'allowing the sharing of audits for the same facilities or supply chains, which will remove duplication, reduce costs and improve opportunities for co-operation between individual exporters'. 36

A joint project commissioned by LiveCorp and MLA in 2014 sought to determine the occurrence of audit duplication and consideration of options for audit synchronisation. The report identified that supply chain facilities are shared by exporters in 35 per cent of cases, resulting in the duplication of 34 per cent of all performance audits.³⁷ From this, the report estimated that duplication of auditing with ESCAS is costing the Australian live export industry around \$1.8 million per two-year cycle.

Anecdotal evidence suggests that where exporters are willing to cooperate with respect to the auditing of shared facilities, compliance costs are significantly reduced. 38 In practice, however, few exporters outside of the mature Indonesian market have been found to cooperate. There is also considerable uncertainty with respect to the extent that shared audits are allowed under the existing regulations. According to the review of audit application:

While ESCAS requirements allow for shared audits, 'it is on the condition that such sharing occurs where an entire supply chain is identical between exporters. In practice, such a scenario occurs infrequently and, due to commercial sensitivities, sharing between exporters is low'.39

One of the benefits of quality assurance programs is the continuous improvement of processes and operations that usually accompanies participation in these programs. Over time, it would not be unrealistic to assume that this would lead to a reduction in risk across the live export industry with concomitant audit savings. For example, if we assume that currently 30 per cent of facilities are 'low risk' but that after three years under a quality assurance program this would increase to 60 per cent, this may well lead to savings of around \$1.6 million per annum for the industry.

Maintaining control and traceability

The exporters interviewed consistently identified maintaining traceability systems and records as a significant regulatory burden. The requirement for individual traceability for cattle and buffalo, in particular, adds significant costs to the supply chain. For example, the MLA's 2014 study identified 12 steps in the traceability process for cattle, from the scanning of electronic identification tags to the maintenance of records by the exporter in Excel, Access or a customised database. In comparison, 10 steps were identified in the traceability process for sheep. 40

The direct costs associated with the ongoing task of maintaining control and traceability in the

 $^{^{36}}$ Australian Government (2015), Exporter Supply Chain Assurance System Report, p.43.

 $^{^{}m 37}$ MLA (2014), Exporter Supply Chain Assurance System - Review of audit duplication and consideration of options for audit synchronisation, p.2.

³⁸ LiveCorp/MLA (2014), Exporter Supply Chain Assurance System - Development of a risk management and quality assurance program, p.48.

⁴⁰ LiveCorp/MLA (2014), Exporter Supply Chain Assurance System - Development of a risk management and quality assurance program, p. 18.

supply chain is estimated at around \$4.2 million for exporters per annum. However, it must be noted that costs varied significantly by exporter depending on the arrangements in place. For example, some exporters undertake the activity in-house. Others, particularly larger exporters, will tend to bring in staff to undertake the function such as supply chain managers, animal welfare officers, and additional lines of reporting. Others still, have outsourced the activity to a third party provider. In many cases, it is difficult to disentangle costs associated with the traceability process from the broader function of the staff member or third party provider.

The traceability process is also one where exporters have identified considerable regulatory creep and duplication, with requirements around systems and documentation growing over time, and compliance costs commensurate with this. The use of CCTVs in cattle facilities was one example provided in the interviews of a new requirement imposed within the last two years. In some facilities, particularly in relatively new markets such as Vietnam, the urgency with which the measure has been implemented has caused considerable duplication in areas. For example, one exporter flagged the use of four different traceability systems (including CCTVs) in just one facility within Vietnam.

Duplication introduces unnecessary administration for the exporters. While a full analysis of the extent of duplication has not been done, rectifying this could yield significant savings. With service fees for CCTV traceability systems quoted at around \$130,000 per year by the exporter, the regulatory savings from this one facility in Vietnam alone, could reach up to \$400,000 per annum.

Duplication in traceability systems also introduces considerable complexity for importers, who have to train their staff to use four different systems and manage these systems separately within one facility. While the Department does not inhibit the sharing of systems across facilities, as with audit activities, exporters seldom cooperate for reasons most often related to time constraints and commercial sensitivities.

Administration costs related to non-compliance events

In 2015, there were 45 complaints and investigations related to non-compliance.⁴¹ Reports of non-compliance currently trigger an immediate assessment process to determine where the non-compliance occurred and which exporters may have been involved. If credible evidence is found of non-compliance then the Department decides whether immediate action is required and instigates a full investigation. Investigations range between 2 and 12 months, with an average of 6.9 months.⁴²

With each non-compliance event, exporters must liaise with importers and facility owners to collect all evidence surrounding the report; analyse the data collected; prepare an investigation report to the Department; and assist the Department with its investigation. This can be a time consuming and costly process, particularly when the required evidence is difficult to locate. For example, the Department found that evidence to establish non-compliance was insufficient for 13 of the 22 third party reports received. The longer the time between an incident and its report to the Department, the more difficult it becomes to obtain the required evidence. The direct costs associated with the 45 investigation reports alone are estimated at \$0.12 million per annum. However, this does not

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⁴¹ Department of Agriculture, *Regulatory compliance investigations*, last accessed 29 February 2016 from: <a href="http://www.agriculture.gov.au/export/controlled-goods/live-animals/livestock/regulatory-framework/compliance-investigations/investigations-regulatory-compliance-investigation-investigation-regulatory-compliance-investigation-regulatory-compliance-investigation-re

⁴² Australian Government (2015), Exporter Supply Chain Assurance System Report, p.25

⁴³ Ibid., p.26

include the costs related to the often voluntary and compulsory remediation measures as a result of the incident.

Managing non-compliance is inherently difficult. Exporters are required to manage off-shore entities that are subject to different, often conflicting, regulatory requirements to Australia. The main avenue for exporters to encourage compliance is the risk of importers losing access to Australian livestock. However, suspending the use of a facility or supply chain that already contains Australian livestock is not always possible. As a result of these difficulties, exporters have had to initiate their own responses at a considerable cost to their business. This has included the voluntary suspension of trade with a number of importers, providing additional training, arranging for additional oversight of supply chains, and upgrading facilities (cost discussed elsewhere).

By its very existence, ESCAS should provide the livestock industry with the confidence to proactively report and respond to incidents. However, despite exporters arguably being the best placed to identify incidents of non-compliance; Figure 6 shows that only 31 per cent of total incidents have been self-reported. While exporters recognise the importance of appropriately dealing with non-compliance events for the stability of the industry, concerns have been raised over the Department's consistency in applying non-compliance ratings and in how it applies regulatory action. The Department's wide discretionary powers and lack of predictability in this respect, has led to sub-optimal self-reporting by exporters of potential problems.

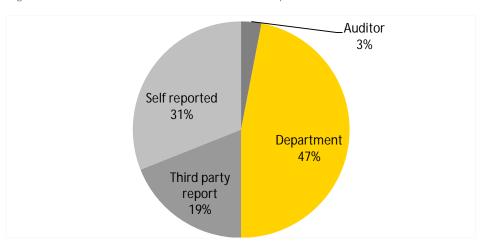


Figure 6 Sources of detection of ESCAS non-compliance

Source: Exporter Supply Chain Assurance System (2015), p.24.

1.3.3.2 Substantive compliance costs

Substantive compliance costs may be defined as costs that directly lead to the regulated outcome. Table 8 shows the most significant self-reported costs for the five exporters interviewed.

Table 9 Substantive compliance costs relating to ESCAS requirements, per annum

Item	Total cost (\$million)
Infrastructure and other capital costs	2.1
Training costs	1.8
Travel and accommodation costs for staff off-shore	1.2
Negotiation and implementation of contracts with importers	1.0
Total	6.1

Expenditure on infrastructure and training made up around 64 per cent of substantive compliance costs for exporters, or an estimated \$3.9 million per annum. This is on top of the \$7.4 million in

LEP funding for investments in the development of materials, training of staff within the supply chain, and infrastructure improvements referred to in Section 1.2. At least 30 per cent of LEP funds are collected from levies to exporters, the remaining funds come from producers (50%) and government (20%).44

Training and infrastructure costs differed significantly between exporters, often depending on the maturity of the markets serviced; reliance on the LEP; and the degree to which costs can be passed on to importers. Of course, there is often a trade-off between an exporter's ability to pass-on costs and that exporter's competitiveness relative to other countries that don't have ESCAS-like requirements. While some exporters identified significant ongoing capital costs associated with ESCAS (e.g. CCTV service fees and stunner maintenance fees), it is likely that with time costs will stabilise and eventually start falling as more supply chains become fully established.

Other substantive compliance costs are associated with the negotiation and implementation of contracts with importers to ensure control and traceability within the supply chain (\$1.0 million per annum) and associated travel and accommodation costs (\$1.2 million per annum).

It is worth noting that 84 per cent of substantive compliance costs are fixed costs and 64 per cent of direct costs overall are fixed. This means that smaller exporters with smaller supply chains are currently bearing a disproportionate amount of the regulatory burden, relative to larger exporters who can benefit from economies of scale (i.e. are able to spread the costs over a larger number of facilities and animals). This is demonstrated in Error! Reference source not found..

1.3.3.3 Delay costs

Delay costs may be defined as expenses and loss of income incurred in the process of completing an administrative application requirement that prevents a regulated entity from commencing its intended operations. In the context of ESCAS, application and approval delays may be experienced at the commencement of a supply chain (through the ESCAS application process) and every time a facility or importer is added to the supply chain (through the variation application process).

Typically a variation to a supply chain will be required if the exporter forms a new client relationship and seeks approval to supply; if the importer wants to add a new facility to their own supply chain; or an importer wants to sell to a more competitive facility outside the established supply chain. Particularly in larger and more complex supply chains, price fluctuations and changes in the availability of facilities may drive a frequent need for variations to those supply chains. While data on the total volume of variation applications is not available, we do know that of the ESCAS documents assessed by the Department, 5 per cent are estimated for the approval of variations.⁴⁵

The consequences of delays typically consist of lost income opportunities, standby costs of capital (e.g. demurrage costs) and labour (e.g. animal welfare officers), and costs to maintain the animals (e.g. feed and agistment). There was consensus from those interviewed that that costs associated with delay are not recorded and are difficult to calculate. In many cases, the risk of delay has been incorporated into the operational plans of exporters, thereby avoiding many of the associated financial costs. However, anecdotal evidence suggests that delays cannot always be avoided, with

⁴⁴ Unpublished data provided by LiveCorp on the basis of 2015 data.

⁴⁵ Predicate Partners, 2014, *Business Process Review - Live Animal Exports Program*, Predicate Partners, Canberra.

significant impacts to both exporters and ancillary industries. Moreover, where previously an exporter may have had a contingency plan in place to redirect the shipment to another exporter, this has become increasingly difficult under restrictive ESCAS requirements.

Table 10 provides an illustrative example of the types of delay costs associated with a consignment of 4,000 breeding cattle to China. Delay costs vary widely depending on a number of factors that vary with each market. For example, the size of the consignment will impact on the size of the vessel required and associated demurrage costs, which can vary between \$15,000 and \$50,000 per day. The size of the consignment will also impact on animal holding and fodder costs, which are typically charged on a per head basis. For the hypothetical scenario, these costs amount to around \$33,000 per day. For each day delayed, additional labour costs may also be incurred from having the services of animal welfare officers, stockpersons, and Australian Accredited Vets on standby. This adds another \$1,600 per day, bringing the total delay costs under our conservative scenario to around \$50,000 per day.

Table 10 Example of costs from one day of delay – Based on a 4,000 head consignment of breeding cattle to China

Additional costs	Frequency	Unit cost (\$)	Total cost(\$)
Registered premises	Per head	5	20,000
Demurrage	Per day	15,000	15,000
Fodder	Per head	3.30	13,200
Accredited vet	Per day	800	800
Animal welfare officer	Per day	400	400
Stockperson	Per day	400	400
		Total	49,800

Source: Industry provided estimates

Assuming that 10 per cent of the 1,139 consignments in 2014-15 experienced a short delay and assuming a \$50,000 delay cost per day, this could amount to a total delay costs of \$5.7 million per annum across the industry. A conservative 10 per cent reduction in delay costs could then save the industry over \$0.6 million per annum. This should not be used as a robust estimate but rather as an illustrative example of the possible magnitude of delay costs.

A secondary but perhaps more important impact associated with delays is the increased risk of supply chain leakages and associated non-compliance incidents. Movement of animals to a facility not approved as part of the exporter's supply chain, for example prior to obtaining a variation approval, is classified as non-compliance. This is the case even when the facility is already approved in another supply chain. For example, the ESCAS Review provided data demonstrating that for cattle 'the majority of non-compliance related to movement to facilities that had been approved in an ESCAS for a different export, but not approved in the ESCAS for the export in question'. The report went on to say 'that exporters commonly expressed the view that delays between independent auditing and approving a facility for a supply chain, and confusion where supply chains shared some facilities but not others, has contributed to this problem'.

⁴⁶ Australian Government (2015), Exporter Supply Chain Assurance System Report,p.23

⁴⁷ Ibid.

1.3.4 Indirect costs

Around 100 countries are engaged in the live exports trade. In 2013, Australia was the thirdlargest exporter of both live sheep and live-cattle (by export value) and the fourth-largest exporter of live goats. 48 The primary markets for Australian livestock exports are South-East Asia, the Middle East and North Africa.⁴⁹ While all countries involved in the exportation of livestock must adhere to the OIE's animal welfare standards, only Australia regulates animal welfare standards right through to the point of slaughter in off-shore markets. This places the Australian sector at a competitive disadvantage, including against major competitors such as Thailand, Canada, Brazil and Jordan, whose approaches to the regulation of animal welfare standards vary widely.

Due to its proximity in the region, Australia has retained its position as the main exporter of livestock to South-East Asia (Figure 7). Conversely, our share of live sheep exports is falling in the Middle and North African region (

Figure 8). Part of this decline has been attributed by the Centre of Independent Economics to regulatory burden placed on Australian exporters by ESCAS. 50 However, the long-term trends in livestock export trade show significant fluctuation over time. Trade volumes of sheep were declining long before the introduction of ESCAS. It is therefore difficult to disentangle the impacts of ESCAS from other factors impacting on trade volumes such as price, the Australian dollar, competition, market-specific issues, domestic policies and other commercial factors.⁵¹

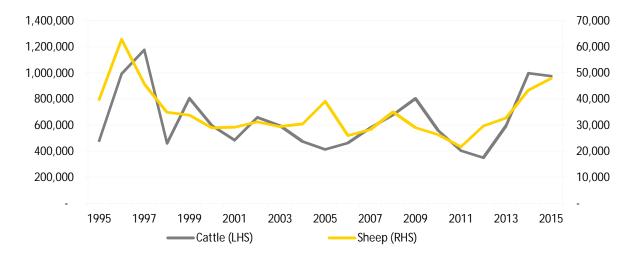


Figure 7 Volume of Australian live exports to South-East Asia, 1995-2015

Source: Food and Agriculture Organisation of the United Nations [used for the period 1995-2013), MLA (November 2015), Australian Livestock Export Statistics [used for the period 2014-15]

 $^{^{48}}$ Food and Agriculture Organisation of the United Nations, Statistics Division, last accessed 3 March 2016 from: http://faostat3.fao.org/download/T/TM/E

⁴⁹ Ibid

⁵⁰ The Centre for International Economics March 2014, *Contribution of live exports to the Australian Wool* Industry, p.26-27.

⁵¹ Deards B, R Leith, C Mifsud, C Murrau, P Martin and T Gleeson (2014), *Live export trade assessment*, research by the Australian Bureau of Agricultural and Resource Economics and Sciences for the Live Animal Exports Reform taskforce, Department of Agriculture.

7.000.000 160,000 140,000 6,000,000 120,000 5,000,000 100,000 4,000,000 80,000 3,000,000 60,000 2,000,000 40,000 1,000,000 20,000 1995 1999 2015 1997 2001 2003 2005 2007 2009 2011 2013 Sheep (LHS) Cattle (RHS)

Figure 8 Volume of Australian live exports to the Middle East and North Africa, 1995-2015

Source: Food and Agriculture Organisation of the United Nations [used for the period 1995-2013), MLA (November 2015), Australian Livestock Export Statistics [used for the period 2014-15]

Nevertheless, it would be difficult to argue that ESCAS has not impacted on discrete markets. ESCAS has been criticised for not being sufficiently flexible and, as a consequence, negatively impacting on trade opportunities for Australian exporters. In particular, it has been argued that the 'one-size-fits –all' approach of ESCAS does not allow for the strength of an importing country's regulations or improvements in the supply chains of exporters to be taken into account. Changes announced in September 2014 to introduce the option of risk-based auditing for compliant supply chains partially address this. However, there is still room for improvement.

Japan is good example of a market where animal welfare standards were already high in 2011 when ESCAS was introduced (Box 1). For Japan, ESCAS has arguably had little impact with respect to animal welfare. Yet, with the exception of fewer audits, exporters to Japan currently share the same fixed regulatory costs as high-risk importers. This suggests greater scope for requirements under ESCAS to be better targeted on a risk basis.

Box 1 ESCAS in Japan

ESCAS was implemented in Japan on 1 September 2012. The introduction of ESCAS was met with significant frustration and resentment, as Japan was a developed country with no sign of the issues that were highlighted in Indonesia. Japan was a technically advanced country with an experienced meat trade that was focussed upon meat quality and high value product. There was particular resentment of the high repetitive cost of auditing Japan's supply chains. There was significant political cost from an industry perspective and threats to wind down the trade entirely if special considerations were not made for advanced countries that largely operated above ESCAS requirements. The estimated volume for the 2014 calendar year is around 11,000 cattle. Although volumes have reduced slightly, there has been no major impact on volumes. Opportunity exists for the Japanese market to be better assessed on a risk basis, with large potential for savings on audits of a mature, established market.

There have been no significant impacts upon welfare due to ESCAS implementation in Japan. The country was already operating at a high standard with use of penetrative stunning in all slaughter facilities. The intensive nature of their feedlot production system is conducive to good animal handling and the production of quiet cattle that are relatively easy to handle.

Source: Submission by the Australian Livestock Industry to the ESCAS Review, July 2014, p.60.

In other cases, ESCAS has been incompatible with traditional livestock sales and distribution

systems, particularly in Saudi Arabia, where trade has been halted due to issues of sovereignty (Box 2).

Box 2 ESCAS faces sovereignty issues in Saudi Arabia

ESCAS has been applicable to Saudi Arabia since 1 September 2012, but no livestock have been exported to KSA since that time. The last shipment of 69,000 sheep went into KSA in August 2012. This was the only shipment in 2012 and only one shipment of 24,000 sheep was exported in 2011. In contrast, 262,500 sheep were exported to KSA in 2010. A similar pattern exists for exports of Australian cattle with only 3,550 cattle exported in August 2012 and only one shipment of 3,007 cattle in 2011. There were 16,501 cattle exported in 2010 and historically, large numbers of livestock have gone into KSA, peaking at 2,140,851 sheep in 2001 and 54,277 cattle in 2002.

The decline in livestock volumes to KSA occurred well before ESCAS, but ESCAS is a contributory reason for the complete cessation of the trade since 2012. From 2010 onwards, prices of Australian sheep and cattle increased significantly and having a major port at Jeddah in the Red Sea, 200km from Sudan and 1,200km from Somalia, provided KSA with a cost effective, high volume alternate supply. Importers in KSA made it abundantly clear that the combination of cheaper stock from Sudan and Somalia, combined with the restrictive control requirements of ESCAS, would ensure livestock from Australia would cease flowing. It was entirely based upon commercial realities at the time ESCAS was introduced.

Since 2012, prices of Australian sheep have adjusted downwards significantly to pre-2010 levels and Australia is once again competitive with Sudan and Somalia. With a more favourable commercial environment, the main hurdle to trade with KSA sits with issues around sovereignty and perceptions of Australia overstepping its regulatory boundaries. Both Government and Industry in KSA resent the sovereign impost that ESCAS represents and are unwilling to move forward under existing arrangements. The two governments are working towards a solution.

Source: Submission by the Australian Livestock Industry to the ESCAS Review, July 2014, p.51.

Kuwait is another market where Australia has arguably experienced losses of market share due to ESCAS. ESCAS was implemented in Kuwait on 1 March 2012. Two supply chains operate in Kuwait. While Figure 9 shows that sheep volumes from Australia have decreased moderately from the pre-ESCAS period, the burden has fallen disproportionally on one exporter, which has previously specialised in trading Australian Awassi sheep.

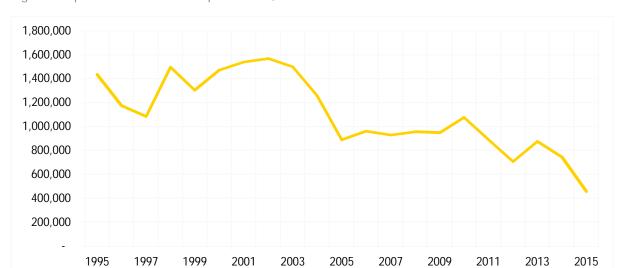


Figure 9 Export volume of live sheep to Kuwait, 1995-2015

Source: Food and Agriculture Organisation of the United Nations [used for the period 1995-2013), MLA (November 2015), Australian Livestock Export Statistics [used for the period 2014-15]

The Awassi is a rare breed of sheep with unique physiological characteristics that makes it highly desirable in certain Middle Eastern markets and thereby sells at a premium in those markets. The breed was introduced into Western Australia in 1994 at considerable expense (around \$40 million) and after a long lead time of research and quarantine (around seven years).

ESCAS is incompatible with the traditional livestock and distribution system in Kuwait. In particular, sheep arriving in Kuwait are received by large importers who then sell livestock on to small traders or butchers providing fresh meat to their local areas. These participants, being excluded under the supply chain due to ESCAS, have had no choice but to rely on local stocks or import sheep from other countries.

The loss to the industry has been significant. Averaging consignments of around 150,000 heads per annum before 2012, trade has now slowed to around 50,000 sheep per annum.52 This has made it increasingly difficult for farmers to enter into forward contracts to supply Awassi sheep at a premium ranging from \$10 to \$15 per sheep.53 A loss of 100,000 sales would therefore translate into a minimum revenue loss of \$1,000,000 per annum, should farmers be forced to sell these sheep on the domestic market or other off-shore markets where they are not as desirable.

The last example provided of market loss is Singapore. Unlike other markets, where trade occurs year round, Singapore is characterised by a single export event immediately prior to the festival of Korban. The introduction of ESCAS in Singapore in 2012 created significant uncertainty in a market where the social and financial impacts of a disruption or delay in trade would be devastating. To mitigate against these risks, importers in Singapore have since been forced to diversify their supply chains. In 2013, Australia's market share in Singapore dropped by 50 per cent, and we now compete with Canada and Ireland in a market that was previously uncontested.54 This example highlights the direct relationship between the uncertainty created by ESCAS for Australia's trading partners and losses in market share for Australian exporters.

⁵² Industry provided data.

⁵³ Industry provided data.

⁵⁴ Industry provided data.

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Adelaide Ernst & Young Building 121 King William Street Adelaide SA 5000 Tel: +61 8 8417 1600 Fax: +61 8 8417 1775

Brisbane 111 Eagle Street Brisbane QLD 4000 Tel: +61 7 3011 3333 Fax: +61 7 3011 3100

Canberra
Ernst & Young Building
121 Marcus Clarke Street
Canberra ACT 2600
Tel: +61 2 6267 3888
Fax: +61 2 6246 1500

Gold Coast 12-14 Marine Parade Southport QLD 4215 Tel: +61 7 5571 3000 Fax: +61 7 5571 3033

Melbourne Ernst & Young Building 8 Exhibition Street Melbourne VIC 3000 Tel: +61 3 9288 8000 Fax: +61 3 8650 7777 Perth Ernst & Young Building 11 Mounts Bay Road Perth WA 6000 Tel: +61 8 9429 2222 Fax: +61 8 9429 2436

Sydney Ernst & Young Centre 680 George Street Sydney NSW 2000 Tel: +61 2 9248 5555 Fax: +61 2 9248 5959