



final report

Project code: W.LIV.3014
Prepared by: Peter Schuster
Schuster Consulting
Group
Date published: February 2014
ISBN: 9781925045932

PUBLISHED BY
Meat & Livestock Australia Limited
Locked Bag 991
NORTH SYDNEY NSW 2059

Exporter Supply Chain Assurance System - Development of a risk management and quality assurance program

Meat & Livestock Australia acknowledges the matching funds provided by the Australian Government to support the research and development detailed in this publication.

This publication is published by Meat & Livestock Australia Limited ABN 39 081 678 364 (MLA). Care is taken to ensure the accuracy of the information contained in this publication. However MLA cannot accept responsibility for the accuracy or completeness of the information or opinions contained in the publication. You should make your own enquiries before making decisions concerning your interests. Reproduction in whole or in part of this publication is prohibited without prior written consent of MLA.

Abstract

The Australian Government introduced a regulatory framework for the live export trade in 2011 that covers the entire supply chain in overseas market places from the point of disembarkation to the point of slaughter. The Exporter Supply Chain Assurance System (ESCAS) places the responsibility on Australian exporters to maintain control and ensure measurable animal welfare outcomes in-market.

The livestock export industry has developed a portfolio of research to assist the industry implement ESCAS and the recommendations of the Independent Review of Australia's Livestock Export Trade, also known as the Farmer Review.

Project W.LIV.3014 considers the feasibility and requirements of a risk management and quality assurance program to complement ESCAS that includes the portfolio of research already developed by the industry and Government.

Executive Summary

The Australian Government introduced a regulatory framework in 2011 for the live export trade that covers the entire supply chain in overseas market places from the point of disembarkation to the point of slaughter. Known as the Exporter Supply Chain Assurance System (ESCAS), this system places the responsibility on Australian exporters to maintain control of exported animals and ensure measurable animal welfare outcomes in-market.

The live export industry subsequently commissioned research into the feasibility of a risk management and quality assurance (QA) program to complement ESCAS. This research was to:

- Identify all existing systems and resources being utilised to achieve ESCAS compliance and assess the strength and weakness of such systems.
- Identify, review and document risk management and QA models in place in other industries and sectors.
- Examine the cost of compliance with the current ESCAS framework.
- Consider the relevance of an industry-initiated risk management and QA program or management solution; conformance with which would facilitate ESCAS compliance.
- Make recommendations for the development of such a program.

This research was undertaken in two stages:

- Primary research which involved consultation with 12 major exporters operating in the Australian live export industry and the Australian Government Department of Agriculture, Fisheries and Forestry to develop an understanding of the systems, procedures and issues influencing ESCAS compliance.
- Secondary research through which existing resources used to support the live export industry and ESCAS compliance were reviewed along with risk management and QA programs being utilised in other industries to identify the common elements of successful programs.

The research found that all exporters and the supply chains they service have introduced systems and procedures to facilitate compliance with the traceability, control and animal welfare requirements of ESCAS. While these are typically informal in nature, they tend to have at their centre resources developed by industry to support compliance with ESCAS.

The majority of critical control points in the ESCAS supply chains have appropriate control measures, compliance procedures and compliance systems in place to mitigate the risk of non-compliance with ESCAS. Gaps and weaknesses do, however, exist and have been documented. Of particular concern to the Australian Government is the period between ESCAS audits and it is the risk of non-compliance during this period which the Government has indicated may be best addressed through an industry-initiated QA program.

Ten non-livestock export QA and/or risk management programs were reviewed in detail. A further 17 programs, manuals, reports, guides and documents were also reviewed.

The programs reviewed were found to share a number of common characteristics:

- Typical structures exist for the management of programs in which there is, at a minimum, an owner, an advisory committee, a certifier and auditors.
- QA programs are generally certification programs with certifiers operating in the country in which the party to be certified operates. This is likely due to litigious and/or insurance reasons and in response to concerns relating to sovereign rights.
- Internationally recognised guidelines, principles and terminology exist for QA and risk management.
- QA programs that assure components of a supply chain or provide an unbroken record of possession and treatment of a product throughout a supply chain (ie "chain of custody"), typically require individual facilities or "units" within the supply chain to be recognised.
- Methods for assessing conformance with a QA program typically involve a combination of first-party assessment with third-party verification.
- Methods for undertaking assessments are typically combined and include remote and on-site auditing.
- Surveillance frequency based on risk assessment allows for greater program flexibility.

In addition, effective QA programs:

- Include a method to promote continual improvement.
- Are scalable to enable additional requirements to be adopted.
- Are adaptable such that changes to the program and standards may be accommodated.
- Are aspirational - aspiring to best practice.
- May be customised when applied internationally to accommodate cultural, economic, political, legal and technological sensitivities.
- Are flexible in design to allow parallel operations under certain conditions.
- Have clearly defined drivers.

Based on the research, it is recommended that industry pursue the development of a QA program (Program), complemented by risk assessment, to support the live export industry in aspiring to best practice and achieving ESCAS compliance.

Additional recommendations include that:

- The Program be a certification program.
- Multiple and independent certification bodies be used and that these be market-centric and charged with certifying units within, or in close proximity to, that market.
- The Program be applicable at the unit level and, as such, allow individual units within a supply chain to achieve certification.
- The Program use a combination of first-party and third-party verification methods.
- The Program use a combination of remote and on-site assessment methods.
- The frequency of surveillance activities be determined based on risk.
- A set of standards be developed that has two compulsory elements; QA and risk management.
- ESCAS requirements become normative elements under the Program Standards.
- A series of rules and conformance measures be developed relating to the Program requirements and governing the use of any Program certification marks.
- Other relevant Program related reference material, such as record keeping templates, training, procedures and manuals, be produced or modified from existing material.
- A centralised management system be introduced that will assist units in the adoption of and conformance with the Program Standards and Rules.

The project required that the cost of compliance with the current ESCAS framework be examined such that economic cost changes associated with the introduction of a risk management and QA model may be assessed.

The introduction of a risk management and QA model may well increase the economic cost of compliance but may also provide greater assurance and support the continuation of the trade, thus reducing or mitigating less direct costs of compliance and potentially the costs associated with trade disruption.

Critical to the success of any program stemming from this research will be acceptance by the Australian Government and the granting by the Government of ESCAS-related concessions for those involved in the program.

Contents

1.	Background.....	9
1.1.	Project objectives	9
1.2.	Scope.....	11
1.3.	Organisation conducting the project.....	11
2.	Approach	12
2.1.	Information gathering	12
2.1.1.	Consultation – Primary research	12
2.1.2.	Review of other QA programs – Secondary research	13
2.2.	Documentation of findings.....	14
2.3.	Treatment of risk management versus QA	14
3.	Existing compliance procedures and measures	15
3.1.	Defining control points, measures and compliance procedures.....	15
3.2.	Research methodology	17
3.3.	Findings.....	17
3.3.1.	Self-reporting	36
3.3.2.	Variation by market	36
3.3.3.	Discussion with DAFF	36
3.4.	Conclusions	37
4.	Cost of compliance.....	39
4.1.	Defining compliance costs.....	39
4.1.1.	Assumptions and scope	39
4.1.2.	Measuring compliance costs.....	40
4.1.3.	Prior research	40
4.1.4.	Process of being compliant	40
4.1.5.	Attitude toward compliance	41
4.1.6.	Research methodology	41
4.1.7.	Cost of compliance findings	42
4.1.8.	Discussion of findings	47
4.1.9.	Quantitative analysis	50
4.2.	Conclusions	50
5.	Review of other QA and risk management programs	52
5.1.	Program selection.....	52
5.2.	Research methodology	52
5.3.	Findings.....	53
5.3.1.	Structure of a QA program	53
5.3.2.	Structure of a risk management program	54
5.3.3.	Success of QA and risk management programs	54
5.3.4.	Management structure	57
5.3.5.	Recognition at unit or supply chain level	57
5.3.6.	Method of recognition	58
5.3.7.	Verification methods	58
5.4.	Method and frequency of assessment	59
5.5.	Location of certifier	60
5.6.	The use of tiers within programs.....	61
5.7.	Allowance for parallel operations.....	61
5.8.	Conclusions	61

6.	Consideration of various approaches to QA	63
6.1.	Management structure	64
6.2.	Program structure	67
6.2.1.	Recognition at unit or supply chain level	67
6.2.2.	Method of recognition	68
6.2.3.	Assessment and verification methods and frequency	69
6.2.4.	Location of certifier	70
6.2.5.	Use of tiers within the program	71
6.2.6.	Formalised standards and procedures	73
6.3.	Consideration of an aspirational pathway	74
6.4.	Consideration of through-chain application	75
7.	Summary and conclusions drawn from overall findings	76
8.	Recommendations	80
8.1.	Recommendation details	86
8.2.	Management structure	86
8.3.	Program structure and implementation	88
8.4.	Certification	90
8.5.	Unit recognition	91
8.6.	Combined verification and assessment methods	91
8.6.1.	Approach for self-assessment	92
8.6.2.	Approach for desktop audits	93
8.7.	Unit and supply chain assessment interaction	94
8.8.	Surveillance frequency determined by risk	94
8.8.1.	Approach for surveillance frequency risk evaluation	95
8.8.2.	Method for developing the <i>Surveillance Frequency Risk Evaluation Template</i>	95
8.8.3.	Risk rating to determine surveillance frequency	101
8.8.4.	Use of the <i>Surveillance Frequency Risk Evaluation Templates</i>	102
8.9.	Allowance for parallel operations	102
8.10.	Formalised standards, rules and reference materials	102
8.10.1.	Standards	102
8.10.2.	Certification marks	105
8.10.3.	Rules	105
8.10.4.	Non-conformance measures	106
8.10.5.	Other reference materials	107
8.10.6.	Control of documents and records within the Program administration	107
8.10.7.	Use of existing materials	108
8.11.	Centralised management system	109
8.12.	Program key performance indicators	111
APPENDIX 1: Content of email sent to exporters		112
APPENDIX 2: Element 1 - Quality management systems		114
APPENDIX 3: Element 2 - Risk management systems		126
APPENDIX 4: Example of the method for forming Elements 3-8		134
APPENDIX 5: Conformance measures, sanctions and reporting		135
APPENDIX 6: The Program's documents register		141
APPENDIX 7: The Program's records register		142

Table of tables

Table 1: Project objectives with reference to corresponding report sections.....	9
Table 2: Summary of typical compliance measures for ESCAS	18
Table 3: Identification and appraisal of general CCPs, control measures, compliance procedures and systems	18
Table 4: Three most costly compliance activities	43
Table 5: Economic cost per head of compliance with ESCAS.....	50
Table 6: Options for the appointment of roles fundamental to the Program	64
Table 7: Unit-based vs supply chain-based recognition.....	67
Table 8: Certification vs registration	68
Table 9: Consideration of options for assessment, verification and frequency.....	69
Table 10: Pros and cons of domestic (Australian)-based certifier vs in-market certifier	70
Table 11: Pros and cons of tiered vs flat structures	71
Table 12: Structure for a tiered or flat structure within the Program	72
Table 13: Considerations for ESCAS integration into the Program standards	73
Table 14: Pathway for Program evolution	74
Table 15: Recommendations and references to further details	80
Table 16: Recommended Program management structure	87
Table 17: Conversion and certified structure of the Program.....	88
Table 18: Pathway for Program evolution	89
Table 19: Combinations of first- and third-party verification with remote and on-site auditing	91
Table 20: Points assigned to risk factors.....	97
Table 21: Example Supply chain surveillance frequency risk evaluation template.....	98
Table 22: Example risk ratings for a unit.....	101
Table 23: Example surveillance frequencies based on risk ratings	101
Table 24: Conversion of ESCAS requirements into normative Program standards	103
Table 25: Standard elements of the Program	104
Table 26: An example of elements a unit would require based on operations	105
Table 27: Non-conformance classifications for self-assessment	106
Table 28: Types of documents required for the Program.....	116
Table 29: Types of records required for the Program	117
Table 30: Conformance classifications for self-assessment	122
Table 31: Reporting frequency for non-conformance.....	125
Table 32: Likelihood and impact points for risks	128
Table 33: Example Risk register	132
Table 34: Example Priority risk table and risk treatment plan	133
Table 35: Example showing how various guidance, requirements and protocols are combined into normative standards for the Program Element 3.....	134
Table 36: Reporting frequency for non-conformance.....	137

Table of figures

Figure 1: Typical flow of animals through an export supply chain (from arrival)	16
Figure 2: Critical control point decision tree	16
Figure 3: A Chain of custody program from Australia to slaughter in-market	75
Figure 4: Risk Matrix for Scoring and Prioritising Risk	129

1. Background

The Australian Government has introduced a new regulatory framework for the live export trade that covers the entire supply chain in overseas market places from the point of disembarkation to the point of slaughter. The Exporter Supply Chain Assurance System (ESCAS) places the responsibility on Australian exporters to maintain control and ensure measurable animal welfare outcomes in-market.

Under ESCAS, exporters must:

1. Meet World Organisation for Animal Health (OIE) guidelines for animal welfare.
2. Enable animals to be effectively traced or accounted for by exporters within a supply chain through to slaughter.
3. Have appropriate control through reporting and accountability.
4. Be independently verified and audited.

The livestock export industry has developed a portfolio of research to assist the industry implement ESCAS and the recommendations of the Independent Review of Australia's Livestock Export Trade, also known as the Farmer Review.

1.1. Project objectives

The objectives of project W.LIV.3014 are outlined in Table 1, along with the sections of this report that address these objectives.

Table 1: Project objectives with reference to corresponding report sections

Objective	Reference
1. Consult with industry on the ESCAS system and document current compliance procedures that are in place.	Section 2 Section 3
2. Consider and refine the existing compliance management model for Indonesian abattoirs (cattle) developed by MLA/LiveCorp.	Section 2 and Section 3
3. Identify critical control points through supply chain (applicable to each market and species) and assess the strength and weakness of existing compliance systems.	Section 3
4. Identify, review and document risk management and quality assurance (QA) models in place in other industries and sectors.	Section 5
5. Provide recommendations for the development of a risk management and QA program model that:	Section 8
a) Meets the expectations of the Australian Government in terms of risk based assessments and associated auditing regimes	Section 8.6 Section 8.8
b) has a set of consistent procedures through the chain and across the industry	Section 8

Objective (continued)	Reference
c) has a set of tools for risk assessment and mitigation	Section 8.8 Section 8.10 Appendix 2-7
d) is based on a self-assessment, risk management process	Section 8.6 Section 8.8 Appendix 3
e) has training procedures and guidelines for those engaged through the supply chain	Section 8.0.5 Section 8.10.7 Appendix 2
f) has reporting procedures for supply chain compliance performance and a structured data collection system to demonstrate compliance	Section 8.6 Section 8.8 Section 8.11 Appendix 6-7
g) can be extended to all markets and species (existing and future)	Section 7
h) can be extended domestically to become a "whole of chain" (all activities or facilities in a supply chain) QA program model	Section 6.4
i) includes recommendations for an implementation program, including key components of structure and delivery.	Section 8
6. Examine the cost of compliance with the current ESCAS framework and establish a cost of compliance benchmark.	Section 4
7. Identify key performance indicators against which the QA program's effectiveness can be demonstrated.	Section 8.12
8. Identify potential improvements that can be made to the ESCAS system to direct future evaluations of industry research and reform activities.	Inherent

1.2. Scope

The scope of this project is restricted to the development of recommendations for a QA and risk management program and does not include the implementation of those recommendations nor the actual design and development of the program, rules, standards or associated resources.

1.3. Organisation conducting the project

Schuster Consulting Group Pty Limited (SCG) is a consultancy company specialising in strategy and planning, project management, QA program delivery and implementation, research and development extension, industry liaison, stakeholder engagement and effective marketing and communications.

SCG has a detailed understanding of ESCAS, having been involved with animal welfare in the live export industry prior to and during the implementation of ESCAS. This involvement has included but not been limited to:

- The development of reporting templates to facilitate supply chain compliance with ESCAS
- In-market reviews and gap analysis
- The development of animal handler training material
- The development of standard operating procedures
- In market independent animal welfare monitoring
- Supply chain ESCAS consultation

In addition, SCG has been involved with strategic reviews, assessment, development and general consultation of industry related QA programs including CATTLECARE, FLOCKCARE, Livestock Production Assurance Quality Assurance and the Pasturefed Cattle Assurance Scheme.

2. Approach

2.1. Information gathering

In consultation with MLA, LiveCorp, industry consultants and other supply chain participants, the project team:

- Identified existing conformance procedures and supporting documentation within the range of livestock export supply chains. Stakeholders were identified and approached such that resources currently under development or in use could be catalogued and assessed for merit against the requirements of a risk management and QA program. The cost of compliance with ESCAS was also gauged through this process.
- Identified the critical control points associated with each type of live export supply chain and mapped against the existing conformance procedures and supporting documentation being used to demonstrate conformance with ESCAS. Identified areas where the existing conformance procedures and documentation fail to adequately address the critical control points.
- Assessed the strengths and weaknesses of existing conformance or risk management systems introduced to facilitate compliance with ESCAS.
- Identified and assessed a selection of existing non-live export risk management and QA programs to identify models operating in other industries which may be transposed in part or full to the live export industry.

2.1.1. Consultation – Primary research

The following entities were consulted during the project:

- Australian Rural Exports Pty Ltd (AUSTREX)
- Australian Government Department of Agriculture, Fisheries and Forestry (DAFF) - Live Animal Export Division, Animal Export Reform Branch
- Capricorn Pastoral Pty Limited
- Elders International Trading
- Emanuel Exports Pty Ltd
- Halleen Australasian Livestock Traders Pty Ltd
- International Livestock Export Pty Ltd
- Lembiru Livestock Pty Ltd
- Livestock Shipping Services (in consultation with Sam Brown)
- Meat & Livestock Australia - Indonesia, Middle East and North Africa
- P & D Exports Pty Ltd
- South East Asian Livestock Services Pty Ltd (SEALS)
- StockAir Pty Ltd
- Wellard Rural Pty Ltd

Much of the information gathered during the consultation process was provided on a commercial in confidence basis and is therefore reported in a socialised manner within this report. All information, including that provided in confidence, has been considered in the formulation of the recommendations stemming from this report.

2.1.2. Review of other QA programs – Secondary research

A range of programs, literature and materials were reviewed as part of the secondary research.

Ten non-live export QA and certification programs were reviewed in detail:

- Australia's State Aviation Safety Program
- Certified Organic Standard
- Forest Stewardship Council Chain of Custody
- GLOBALGAP
- The Australian Forestry Standard
- The Australian Forestry Standard for Sustainable Forest Management (Draft)
- Red Tractor Assurance for Farms Schemes
- Australasian College for Emergency Medicine - Policies and Guidelines
- The Australian Council on Healthcare Standards: Accreditation, Standards and Guidelines - Clinical Function
- Marine Stewardship Council Chain of Custody

The following programs, systems, manuals and documents were also reviewed and considered in the formulation of the recommendations:

- Livestock Production Assurance Quality Assurance
- FLOCKCARE and CATTLECARE
- Pasturefed Cattle Assurance System
- Livestock Export Accreditation Program
- Meat Standards Australia
- National Feedlot Accreditation Scheme
- Rules of Procedure Governing the use of the JAS-ANZ Accreditation Symbol
- AS/NZS ISO 9001:2008 Quality management systems - Requirements
- AS/NZS ISO 31000:2009 Risk management - Principles and guidelines
- SAE Aerospace Recommended Practice: Supply Chain Risk Management Guidelines
- Australian Standards SC-00 series relating to the preparation of standards and standardisation
- The ESCAS Standard Compliance Model for Indonesian Abattoirs (B. Scott)

- Shellfish Quality Assurance Program
- Australian Horticultural Corporation's AUSTRALIAfresh Certification Scheme
- Deer Industry Quality Assured Program
- The National Egg Quality Assured Program (EggCorp Assured) and the Egg Standards Australasia/Australia Certification Rules
- Dairy Farm Assurance
- HenCare Quality Assurance Programme for Victorian Egg Producers

2.2. Documentation of findings

Given the volume of information collected, reviewed and analysed during this project, the four main areas of research are reported separately and then considered as a whole in the recommendations. These areas of research are reported as follows:

- Section 3: Existing compliance procedures and measures
- Section 4: Cost of compliance
- Section 5: Review of other QA and risk management programs
- Section 6: Consideration of alternative options

2.3. Treatment of risk management versus QA

The project required the consultants to investigate the development of a risk management and QA program for the live export industry. The research demonstrated that the most effective application of risk management was as an element of a broader QA program and, as such, reference to QA throughout this report as it applies to the live export industry should be interpreted as risk management and QA unless otherwise stated.

Risk management is addressed specifically in Appendix 3.

3. Existing compliance procedures and measures

The terms of reference required that existing compliance systems and procedures in place within the live export supply chain to achieve compliance with ESCAS be identified and critiqued.

The critical control points associated with each type of livestock export supply chain (all markets and all species) were also to be identified and the effectiveness of the current compliance procedures in managing issues associated with these critical control points was to be assessed and compared. Areas where current systems, procedures and documentation fail to adequately address risk of non-compliance were to be identified.

3.1. Defining control points, measures and compliance procedures

The following definitions, based on hazard analysis and critical control points (HACCP) principles, have been adopted in this report:

- A **critical control point** (CCP) is a point, step or procedure in the supply chain at which control can be applied and, as such, a "hazard" can be prevented, eliminated or reduced to an acceptable level. In this case a "hazard" is defined to be a breach in one (or more) of the three compliance areas within ESCAS: control, traceability and animal welfare.

Specific CCPs for this project were determined using a flow diagram detailing the generally accepted steps or change in custody of an animal through the export supply chain combined with typical decision tree analysis as outlined in Figures 1 and 2.

- A **control measure** is the method for ensuring control over the CCP (or step) that has been identified as hazardous and is thereby the means to prevent, eliminate or reduce the hazard.
- A **compliance procedure** is the activity that is undertaken to ensure the control measure is effective and therefore the CCP does not breach ESCAS.

Figure 1: Typical flow of animals through an export supply chain (from arrival)

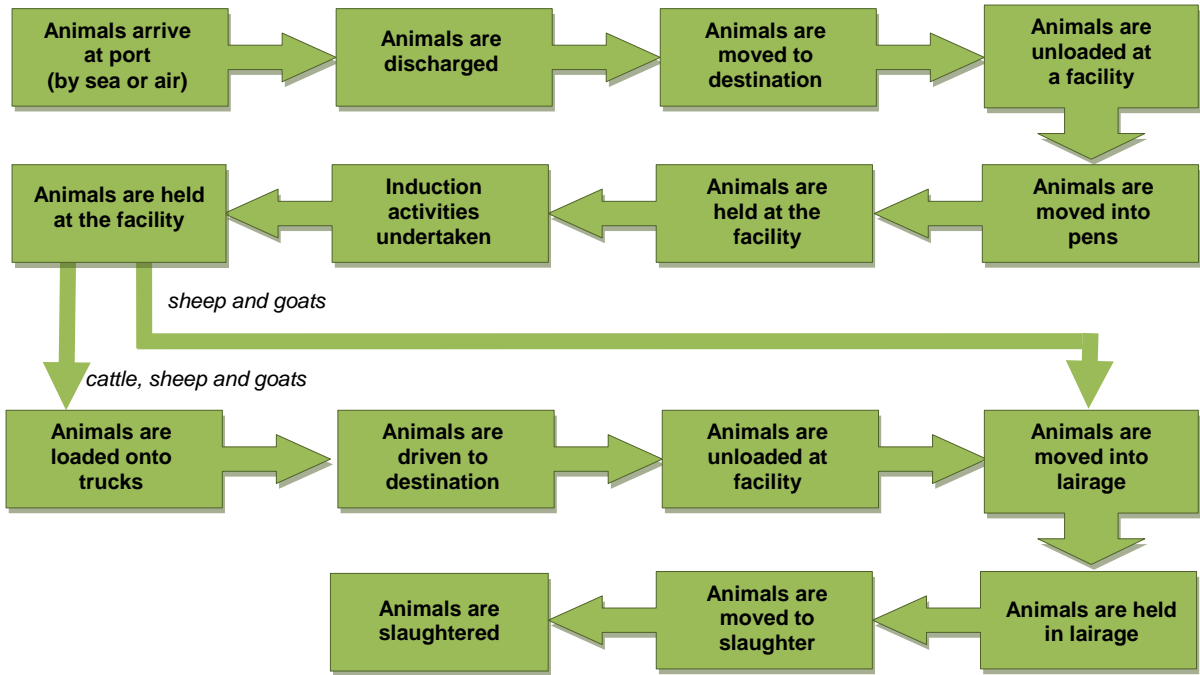
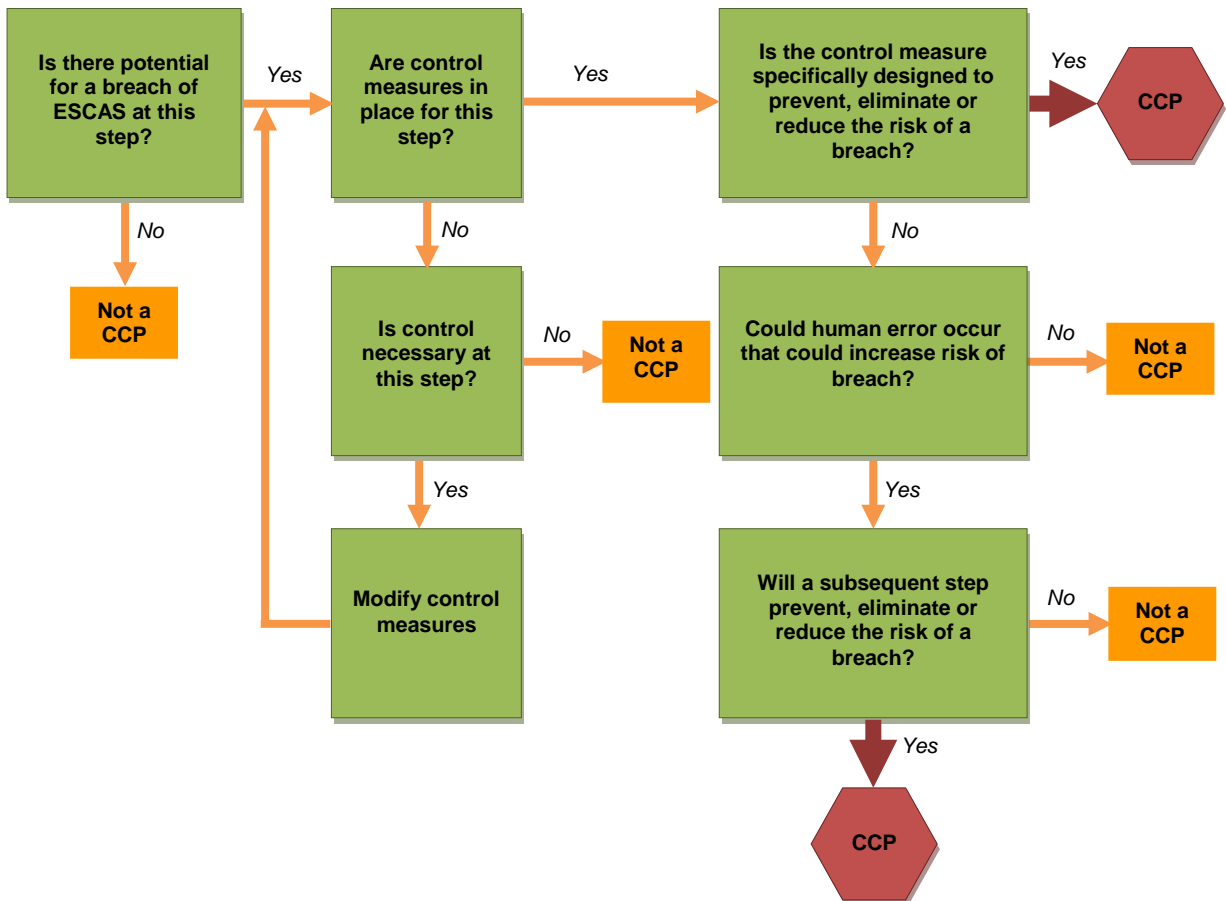


Figure 2: Critical control point decision tree



3.2. Research methodology

In depth interviews were conducted with 12 exporters to establish an insight into current ESCAS compliance procedures, documentation and resources and a number of theories were developed based on this consultation:

1. CCPs are generic across most markets and livestock species with only minor divergences occurring in several select markets. As such, CCPs are best addressed universally with exceptions noted where appropriate for specific markets.
2. Control measures which have been adopted within supply chains are consistent with those which have been recommended by industry and Government to support ESCAS compliance (accepting that these control measures were often developed in consultation with exporters). No meaningful examples of control measures, other than those recommended by industry and Government, existed at the time of writing (with the exception of the installation of CCTV and the introduction of full time security in some facilities).
3. Compliance procedures are similar across sheep and goats but differ slightly for cattle, particularly with respect to traceability.
4. While ad-hoc, ESCAS specific systems had been introduced to meet ESCAS requirements within supply chains, overarching, formalised quality management systems or frameworks were not seen to exist throughout supply chains.

3.3. Findings

All exporters and the supply chains they service have introduced systems and procedures to facilitate compliance with the traceability, control and animal welfare requirements of ESCAS. While aspects of these systems may be formalised as they apply to one particular element of the supply chain, for example at the feedlot, they do not tend to be formalised or unified in their application across the whole supply chain as it relates to ESCAS.

The systems and procedures which are being implemented, while informal in nature, have at their centre resources developed by industry to support compliance with ESCAS, such as standard operating procedures based on those developed for cattle sheep and goats in overseas markets by Meat & Livestock Australia and LiveCorp (2012).

The compliance systems and procedures put in place within the live export supply chain to achieve compliance with ESCAS traceability, control and animal welfare requirements are summarised below in Table 2.

Table 3 identifies the CCPs associated with in market ESCAS compliance along with the control measures, compliance procedures and compliance systems currently in place to mitigate the risk of non-compliance with ESCAS at these CCPs. Compliance measures and associated documents are outlined and the existing processes assessed based on their potential to mitigate risk of non-compliance. This table includes all observed CCPs, control measures, compliance procedures and systems; each of which is not necessarily applicable to all supply chains or situations.

Table 2: Summary of typical compliance measures for ESCAS

Species	Traceability	Control
Cattle	<ol style="list-style-type: none"> Counted off the ship and the number is reconciled against the ship's manifest. Counted on to trucks with numbers recorded on the transport document. Counted off the truck with the number reconciled against the transport document. The electronic identification tag (EID) is scanned into the feedlot (settled). A visual management tag is added and reconciled against the EID. When consigned to slaughter, cattle are counted onto trucks and the number is recorded on the transport documentation. Counted off trucks into the lairage and number reconciled against transport documentation. Scanned at the abattoir upon slaughter or tag is read manually. Tags are usually secured and returned to the importer for destruction. Number and ID of animals slaughtered is reported by the abattoir back to the feedlot and/or importer on a weekly, fortnightly or monthly basis. Slaughter reports compiled by importer in Excel based on records supplied from the abattoir and supplied to the exporter on a weekly, fortnightly or monthly basis. Records are maintained by the exporter in an Excel, Access or customised database with each consignment fully reconciled and closed with the End of Processing report. 	<p>Measures in place to ensure compliance with ESCAS control requirements are:</p> <ul style="list-style-type: none"> Supply chain contracts. Application of the ESCAS Standard Compliance Model for Indonesian Abattoirs and use of the Internal Monitoring Program - Standard Compliance Model AWO Checklist. Use of MLA standard reporting templates at critical control points throughout the supply chain. <p>In some supply chains, the following have been introduced:</p> <ul style="list-style-type: none"> Supply Chain Managers. Senior Animal Welfare Officers (typically shared among facilities). Facility-specific Animal Welfare Officers. Lines of reporting.
Sheep and goats	<ol style="list-style-type: none"> Counted off the ship, number is reconciled against the ship's manifest. Counted on to trucks, recorded on the transport document. Counted off trucks into feedlot, number reconciled against transport document. Counted into pens. Counted out of pens when destined for slaughter on the farm, number slaughtered reconciled against the mob count. Counted out of pens and onto trucks when transported for slaughter away from the feedlot, number is recorded on the transport documentation. Counted off trucks into lairage, number reconciled against transport documentation. Number of animals slaughtered is reported by the abattoir back to the feedlot and/or importer on a weekly, fortnightly or monthly basis. Slaughter reports compiled by importer in Excel based on the records supplied from the abattoir and supplied to the exporter on a weekly, fortnightly or monthly basis. Records are maintained by the exporter in an Excel database (a more sophisticated database may be used where the supply chain also handles cattle but is not considered to be necessary for sheep/goat only supply chains). 	

Table 3: Identification and appraisal of general CCPs, control measures, compliance procedures and systems

Critical control point	Control measure	Compliance procedure	Compliance systems and documents	Potential strengths (S), weaknesses (W) and gaps (G) in current compliance	
Vessel or plane (goats) discharge	Livestock are unloaded from the vessel by competent livestock handlers in a manner that avoids injury and minimises stress.	<ul style="list-style-type: none"> All personnel handling livestock have been trained on the company's standard operating procedures (SOPs). Supervisory staff are onsite to apply corrective measures if necessary. 	<ul style="list-style-type: none"> Discharge Inspection Checklist Discharge/Trucking to Feedlot Report SOPs Stevedore Training Log Animal Handler Training Log AWO 	<ul style="list-style-type: none"> SOPs are generally utilised. 	S
				<ul style="list-style-type: none"> Record keeping and documentation formats inconsistent. 	W
				<ul style="list-style-type: none"> Use of third-party stevedores who may not appreciate the significance of compliance with ESCAS nor received appropriate training. 	W

			<ul style="list-style-type: none"> Truck registration details Truck Driver Training Log 	<ul style="list-style-type: none"> Drivers carry a range of cargo and may not be used to carrying livestock. 	W
				<ul style="list-style-type: none"> Inconsistent protocol determining how the inspection of trucks is to be undertaken, when and where. 	G
				<ul style="list-style-type: none"> SOPs are generally utilised. 	S
				<ul style="list-style-type: none"> Good adoption of handler training. 	S
				<ul style="list-style-type: none"> In some cases trucks owned by feedlot or importer which allows for greater influence over trucking activities. 	S
				<ul style="list-style-type: none"> Lack of consistent protocol to address issues identified during the inspection. 	G

Critical control point	Control measure	Compliance procedure	Compliance systems and documents	Potential strengths (S), weaknesses (W) and gaps (G) in current compliance	
	Livestock are retained within an ESCAS approved supply chain.	<ul style="list-style-type: none"> Livestock are counted onto trucks. Livestock are only loaded onto trucks destined for the relevant ESCAS approved facility Transport records are maintained and numbers counted recorded on transport documentation. 	<ul style="list-style-type: none"> Contract between trucking company and importer that details service level requirements Transport document 	<ul style="list-style-type: none"> Third-party trucking companies who may not appreciate the significance of compliance with ESCAS or have received appropriate training. 	W
				<ul style="list-style-type: none"> Risk of human error or technology malfunction during counting. 	W
During transport (ie: truck in motion)	Vehicle operation is conducted in a manner that avoids injury and minimises stress.	<ul style="list-style-type: none"> All personnel driving transportation vehicles have been trained on the appropriate driving method for transporting livestock. 	<ul style="list-style-type: none"> Contract between trucking company and importer Truck Driver Training Log 	<ul style="list-style-type: none"> Appropriate truck driving technique and protocol not covered by existing industry SOPs and therefore not necessarily covered by company SOP or service agreements. 	W
				<ul style="list-style-type: none"> Contract may not specify driving method/service level requirement especially covering breakdowns 	W

				and escapees.	
				<ul style="list-style-type: none"> In some cases, trucks owned by feedlot or importer which allows for greater influence over trucking activities. 	S
				<ul style="list-style-type: none"> Inherent risk associated with livestock being transported from one location to another and the livestock being diverted. 	W

Critical control point	Control measure	Compliance procedure	Compliance systems and documents	Potential strengths (S), weaknesses (W) and gaps (G) in current compliance	
Unloading at feedlot	Livestock are unloaded from the truck by competent stock handlers in a manner that avoids injury and minimises stress.	<ul style="list-style-type: none"> All personnel handling livestock have been trained on the company's SOPs. Supervisory staff are onsite to apply corrective measures if necessary. 	<ul style="list-style-type: none"> SOPs Animal Handler Training Log 	<ul style="list-style-type: none"> Requirement for ongoing supervision. 	W
				<ul style="list-style-type: none"> SOPs are generally utilised. 	S
				<ul style="list-style-type: none"> Good adoption of handler training. 	S
				<ul style="list-style-type: none"> Well organised and controlled feedlots. 	S
	Facilities are appropriate for the effective unloading of livestock so as to avoid injury and minimise stress.	<ul style="list-style-type: none"> Facilities are inspected prior to unloading. 	<ul style="list-style-type: none"> SOPs Preliminary feedlot inspection report 	<ul style="list-style-type: none"> Gap analysis and attention to guidance documentation relating to ESCAS compliance has delivered appropriate facilities. 	S
				<ul style="list-style-type: none"> Ongoing need for maintenance. 	W
				<ul style="list-style-type: none"> Lack of consistent contingency plan/ protocol to address issues identified during the inspection. 	G
	Livestock are retained within an ESCAS approved supply chain.	<ul style="list-style-type: none"> Livestock are counted off trucks and/or individual EID devices scanned. Number counted off truck reconciled against the 	<ul style="list-style-type: none"> SOPs Transport documents EID device data file Feedlot unloading report Tag Replacement 	<ul style="list-style-type: none"> Risk of human error or technology malfunction during counting. 	W
				<ul style="list-style-type: none"> Management systems in place to maintain pen separation and the segregation of 	S

		<p>transport document.</p> <ul style="list-style-type: none"> Records of mortalities or exclusion for any reason during transport are maintained. Livestock are segregated from local livestock. Adoption of 24 hr/day security at some sheep feedlots. 	<p>Advice</p> <ul style="list-style-type: none"> EID devices Scanners 	<p>ESCAS livestock from non-ESCAS livestock.</p>	
				<ul style="list-style-type: none"> Wide-spread adoption of EID for cattle in conjunction with correlated management tags. 	S
				<ul style="list-style-type: none"> High security at feedlots. 	S

Critical control point	Control measure	Compliance procedure	Compliance systems and documents	Potential strengths (S), weaknesses (W) and gaps (G) in current compliance	
Induction at feedlot (cattle)	Livestock are handled by competent stock handlers in a manner that avoids injury and minimises stress.	<ul style="list-style-type: none"> All personnel interacting with livestock have been trained on the company's SOPs. Supervisory staff are onsite to apply corrective measures if necessary. 	<ul style="list-style-type: none"> SOPs Animal Handler Training Log Contract between importer and feedlot or exporter and feedlot underpinning ESCAS AWO 	<ul style="list-style-type: none"> AWO presence 	S
				<ul style="list-style-type: none"> AWO placement varies - specific/dedicated AWO always onsite, Roving AWO between different sites. 	W
				<ul style="list-style-type: none"> Potential in some sites for no AWO presence. 	W
	Appropriate facilities exist to undertake induction.	<ul style="list-style-type: none"> Facilities are inspected regularly. 	<ul style="list-style-type: none"> SOPs Animal Handler Training Log Feedlot Inspection Report 	<ul style="list-style-type: none"> Lack of consistent contingency plan/ protocol to address issues identified during the inspection. 	G
	Livestock are retained within an ESCAS approved supply chain.	<ul style="list-style-type: none"> Tagging of livestock with management tags correlated with EID device to extend traceability in the event that device is lost. Electronic recording of EID/management tag; or Manual recording of EID with management tag. Cattle that have lost an identification device are provided with a replacement. Pen movements are recorded. 	<ul style="list-style-type: none"> Pen movement reports EID devices Scanners Visual management tags 	<ul style="list-style-type: none"> Facilities using EID have less opportunity for leakage than those using manual systems. 	S
				<ul style="list-style-type: none"> If manual recording of EID device with management tag is used (unlikely), there is a significant risk of transcription error. 	W
				<ul style="list-style-type: none"> No SOP for traceability activities during induction. 	G
				<ul style="list-style-type: none"> Potential for EID malfunction. 	W

Critical control point	Control measure	Compliance procedure	Compliance systems and documents	Potential strengths (S), weaknesses (W) and gaps (G) in current compliance	
Holding at the feedlot	Facilities are appropriate for the effective holding and handling of livestock so as to ensure the welfare of the animal is not compromised.	<ul style="list-style-type: none"> Facilities are inspected regularly. 	<ul style="list-style-type: none"> SOPs Animal Handler Training Log Feedlot Inspection Report Pen numbers displayed against consignment or animal numbers 	<ul style="list-style-type: none"> Gap analysis and attention to guidance documentation relating to ESCAS compliance has delivered appropriate facilities. 	S
				<ul style="list-style-type: none"> Ongoing need for maintenance. 	W
				<ul style="list-style-type: none"> Lack of consistent contingency plan/ protocol to address issues identified during the inspection. 	G
	Feedlot management operations are such that ensure the welfare of the animal is not compromised.	<ul style="list-style-type: none"> All personnel interacting with livestock have been trained on the company's SOPs. Supervisory staff are onsite to apply corrective measures if necessary. 	<ul style="list-style-type: none"> SOPs Animal Handler Training Log Daily Feedlot Inspection Report Weekly Feedlot Inspection Summary Contract between importer and feedlot or exporter and feedlot underpinning ESCAS AWO Supply Chain Manager 	<ul style="list-style-type: none"> SOPs are generally utilised. 	S
				<ul style="list-style-type: none"> Good adoption of handler training. 	S
				<ul style="list-style-type: none"> AWO presence. 	S
				<ul style="list-style-type: none"> AWO placement varies - specific/dedicated AWO always onsite, Roving AWO between different sites. 	W
				<ul style="list-style-type: none"> Potential in some sites for no AWO presence. 	W
	Livestock are handled by competent stock handlers in a manner that avoids injury and minimises stress.	<ul style="list-style-type: none"> All personnel interacting with livestock have been trained on the company's SOPs. Supervisory staff are onsite to apply corrective measures if necessary. 	<ul style="list-style-type: none"> SOPs Animal Handler Training Log 	<ul style="list-style-type: none"> SOPs are generally utilised. 	S
<ul style="list-style-type: none"> Good adoption of handler training. 				S	
<ul style="list-style-type: none"> High staff retention. 				W	
<ul style="list-style-type: none"> Well organised and controlled feedlots. 				S	

Critical control point	Control measure	Compliance procedure	Compliance systems and documents	Potential strengths (S), weaknesses (W) and gaps (G) in current compliance	
	Livestock are retained within an ESCAS approved	<ul style="list-style-type: none"> Records of mortalities or exclusion for any 	<ul style="list-style-type: none"> SOPs Adoption of 24 hour 	<ul style="list-style-type: none"> Risk of human error or technology malfunction during 	W

	supply chain.	<p>reason during feedlotting are maintained.</p> <ul style="list-style-type: none"> Animals that lose an identification device are provided with a replacement (cattle). Pen movements are recorded. 	<p>security at some feedlots</p> <ul style="list-style-type: none"> Pen movement reports 	<p>counting.</p> <ul style="list-style-type: none"> Management systems in place to maintain pen separation and the segregation of ESCAS livestock from non-ESCAS livestock. Wide-spread adoption of EID for livestock in conjunction with correlated management tags. High security at feedlots. 	<p>S</p> <p>S</p> <p>S</p>
Moving "on-farm" for slaughter (sheep/goats)	Facilities are appropriate for the effective movement and handling of livestock so as to ensure the welfare of the animal is not compromised.	<ul style="list-style-type: none"> Facilities are inspected regularly. 	<ul style="list-style-type: none"> SOPs Animal Handler Training Log Feedlot Inspection Report 	<ul style="list-style-type: none"> SOPs generally used. Good adoption of handler training. Possible absence of designated AWO. Distance to be moved may vary. Ongoing need for maintenance. Lack of consistent contingency plan/ protocol to address issues identified during the inspection. 	<p>S</p> <p>S</p> <p>W</p> <p>W</p> <p>W</p> <p>G</p>

Critical control point	Control measure	Compliance procedure	Compliance systems and documents	Potential strengths, weaknesses and gaps in current compliance
	On-farm management ensures the welfare of the animal is not compromised.	<ul style="list-style-type: none"> All personnel interacting with livestock have been trained on the company's SOPs. Supervisory staff are onsite to apply corrective measures if necessary. 	<ul style="list-style-type: none"> SOPs Animal Handler Training Log Daily Feedlot Inspection Report Weekly Feedlot Inspection Summary Contract between importer and feedlot or exporter and feedlot underpinning ESCAS AWO 	<ul style="list-style-type: none"> SOPs generally used. Supervisory staff not present at all facilities during every slaughter. Good adoption of handler training.

	Livestock are handled by competent stock handlers in a manner that avoids injury and minimises stress.	<ul style="list-style-type: none"> All personnel interacting with livestock have been trained on the company's SOPs. Supervisory staff are onsite to apply corrective measures if necessary. 	<ul style="list-style-type: none"> SOPs Animal Handler Training Log 	<ul style="list-style-type: none"> SOPs are generally utilised. 	S
				<ul style="list-style-type: none"> Good adoption of handler training. High staff retention. 	S W
	Livestock are retained within an ESCAS approved supply chain.	<ul style="list-style-type: none"> Livestock are counted out of feedlot pens and moved to on-farm holding facilities. Livestock are counted into holding facilities. Numbers counted are reconciled against the mob count. Records of mortalities or exclusion for any reason during stay are maintained. Pen movements are recorded. Livestock are segregated from non-ESCAS livestock on the farm. 	<ul style="list-style-type: none"> SOPs Pen movement reports Mob count records 	<ul style="list-style-type: none"> Risk of human error or technology malfunction during counting. 	W
				<ul style="list-style-type: none"> Opportunistic commercial incentive for livestock (goats) to move between supply chains. 	W
				<ul style="list-style-type: none"> In parallel operations, management systems in place to maintain pen separation and the segregation of ESCAS livestock from non-ESCAS livestock. 	S

Critical control point	Control measure	Compliance procedure	Compliance systems and documents	Potential strengths (S), weaknesses (W) and gaps (G) in current compliance	
Loading onto trucks	Livestock are loaded onto trucks by competent stock handlers in a manner that avoids injury and minimises stress.	<ul style="list-style-type: none"> All personnel handling livestock have been trained on the company's SOPs. Supervisory staff are onsite to apply corrective measures. 	<ul style="list-style-type: none"> SOPs Animal Handler Training Log AWO 	<ul style="list-style-type: none"> SOPs are generally utilised. 	S
				<ul style="list-style-type: none"> Good adoption of handler training. 	S
				<ul style="list-style-type: none"> Well organised and controlled feedlots. 	S
				<ul style="list-style-type: none"> AWO presence. 	S
				<ul style="list-style-type: none"> AWO placement varies - specific/dedicated AWO always onsite, Roving AWO between different sites. 	W
				<ul style="list-style-type: none"> Potential in some sites for no AWO. 	W

	Trucks are appropriate for the effective transportation of livestock so as to avoid injury and minimise stress.	<ul style="list-style-type: none"> Trucks are inspected prior to loading. 	<ul style="list-style-type: none"> SOPs Contract between trucking company and importer/feedlot with service level requirements Truck registration details Truck Driver Training Log Standard Compliance Model AWO Checklist – Internal Monitoring Program 	<ul style="list-style-type: none"> Third-party trucking companies who may not appreciate the significance of compliance with ESCAS or have received appropriate training. 	W
				<ul style="list-style-type: none"> Truck drivers carry a range of cargo and may not be used to livestock. 	W
				<ul style="list-style-type: none"> Inconsistent protocol determining how the inspection of trucks is to be undertaken, when and where. 	G
				<ul style="list-style-type: none"> In some cases, trucks owned by feedlot or importer which allows for greater influence over trucking activities. 	S
				<ul style="list-style-type: none"> SOPs are generally utilised. 	S
				<ul style="list-style-type: none"> Good adoption of handler training. 	S
				<ul style="list-style-type: none"> Lack of consistent contingency plan/ protocol to address issues identified during the inspection. 	G
Critical control point	Control measure	Compliance procedure	Compliance systems and documents	Potential strengths (S), weaknesses (W) and gaps (G) in current compliance	
	Livestock are retained within an ESCAS approved supply chain.	<ul style="list-style-type: none"> All animals are recorded as they leave the feedlot for the abattoir and that each truck is issued with a transport docket including number of head, truck registration, and abattoir destination. Livestock are only loaded onto trucks destined for the relevant ESCAS approved facility. 	<ul style="list-style-type: none"> SOPs Contract between trucking company and feedlot that details service level requirements Transport document/Waybill Feedlot Discharge And Trucking To Lairage/Abattoir Report Standard Compliance Model AWO Checklist – Internal Monitoring Program 	<ul style="list-style-type: none"> Possible use of third-party trucking companies who do not appreciate the significance of compliance with ESCAS 	W
				<ul style="list-style-type: none"> Risk of human error or technology malfunction during counting 	W
During transport (ie: truck in motion)	Vehicle operation is conducted in a manner that avoids injury and minimises stress.	<ul style="list-style-type: none"> All personnel driving transportation vehicles have been trained on the appropriate 	<ul style="list-style-type: none"> Contract between trucking company and feedlot 	<ul style="list-style-type: none"> Third-party trucking companies and many non-livestock specific drivers who may not appreciate the significance of 	W

		driving method for transporting livestock.		compliance with ESCAS or have received appropriate training.	
				<ul style="list-style-type: none"> Appropriate truck driving techniques and protocol not covered by existing industry SOPs and therefore not necessarily covered by company SOP or service agreements. 	G
				<ul style="list-style-type: none"> Contract may not specify driving method/service level requirement 	W
				<ul style="list-style-type: none"> In some cases trucks owned by feedlot or importer which allows for greater influence over trucking activities. 	S
				<ul style="list-style-type: none"> Inherent risk associated with livestock being transported from one location to another and the livestock being diverted 	W

Critical control point	Control measure	Compliance procedure	Compliance systems and documents	Potential strengths (S), weaknesses (W) and gaps (G) in current compliance	
Unloading into abattoir	Livestock are unloaded from the truck by competent stock handlers in a manner that avoids injury and minimises stress.	<ul style="list-style-type: none"> Supervisory staff are onsite to apply corrective measures if necessary. 	<ul style="list-style-type: none"> SOPs Animal Handler Training Log Standard Compliance Model AWO Checklist – Internal Monitoring Program AWO 	<ul style="list-style-type: none"> Requirement for ongoing supervision. 	W
				<ul style="list-style-type: none"> SOPs are generally utilised. Good adoption of handler training. AWO presence. AWO placement varies - specific/ dedicated AWO always onsite, roving AWO between different sites. Potential at some sites for no AWO. 	S S S W W
	Facilities are appropriate for the effective unloading of livestock so as to avoid injury and	<ul style="list-style-type: none"> Facilities are inspected prior to unloaded commencing. 	<ul style="list-style-type: none"> SOPs Animal Handler Training Log Standard Compliance Model AWO Checklist 	<ul style="list-style-type: none"> Gap analysis and guidance documentation for ESCAS compliance has delivered appropriate facilities. 	S

	minimise stress.		– Internal Monitoring Program	<ul style="list-style-type: none"> Ongoing need for maintenance. 	W
				<ul style="list-style-type: none"> Lack of consistent contingency plan/ protocol to address issues identified during the inspection. 	G
Livestock are retained within an ESCAS approved supply chain.	<ul style="list-style-type: none"> Livestock are counted off trucks and reconciled against transport documents. EID devices scanned upon arrival at some facilities. Records of mortalities or exclusion for any reason during transport are maintained. Livestock are segregated from non-ESCAS livestock in the lairage. 	<ul style="list-style-type: none"> SOPs Transport document/Waybill Lairage Unloading Report Daily Lairage Inspection Report Standard Compliance Model AWO Checklist – Internal Monitoring Program EID devices Scanners 	<ul style="list-style-type: none"> Third-party trucking companies who may not appreciate the significance of complying with ESCAS or have received appropriate training. 	W	
				<ul style="list-style-type: none"> Risk of human error or technology malfunction during counting. 	W
				<ul style="list-style-type: none"> Trucks are owned by feedlot (sheep). 	S
				<ul style="list-style-type: none"> Multiple facilities in some markets and potential for livestock to be consigned to the wrong facility. 	W

Critical control point	Control measure	Compliance procedure	Compliance systems and documents	Potential strengths (S), weaknesses (W) and gaps (G) in current compliance	
Holding at the abattoir/in lairage	Facilities are appropriate for the effective holding and handling of livestock so as to ensure the welfare of the animal is not compromised.	<ul style="list-style-type: none"> Facilities are inspected regularly. Supervisory staff are onsite to apply corrective measures if necessary. 	<ul style="list-style-type: none"> SOPs Animal Handler Training Log Preliminary Lairage Inspection Report Preliminary Abattoir Inspection Report Standard Compliance Model AWO Checklist – Internal Monitoring Program AWO 	<ul style="list-style-type: none"> Gap analysis and guidance documentation for ESCAS compliance has delivered appropriate facilities. 	S
				<ul style="list-style-type: none"> Ongoing need for maintenance. 	W
				<ul style="list-style-type: none"> Lack of consistent contingency plan/ protocol to address issues identified during the inspection. 	G
				<ul style="list-style-type: none"> Variability in ownership of facility. 	W
				<ul style="list-style-type: none"> AWO presence. 	S
				<ul style="list-style-type: none"> AWO placement varies - specific/dedicated AWO always onsite, Roving AWO between different sites. 	W
				<ul style="list-style-type: none"> Potential in some sites for no AWO presence. 	W

	Abattoir management operations are such that ensure the welfare of the animal is not compromised.	<ul style="list-style-type: none"> Supervisory staff are onsite to apply corrective measures if necessary. 	<ul style="list-style-type: none"> SOPs Animal Handler Training Log Daily Lairage Inspection Report Daily Abattoir Inspection Report Weekly Abattoir Report Standard Compliance Model AWO Checklist – Internal Monitoring Program Contract between abattoir and feedlot AWO 	<ul style="list-style-type: none"> SOPs are generally utilised. 	S
				<ul style="list-style-type: none"> Good adoption of handler training. 	S
				<ul style="list-style-type: none"> AWO presence. 	S
				<ul style="list-style-type: none"> AWO placement varies - specific/dedicated AWO always onsite, roving AWO between different sites. 	W
				<ul style="list-style-type: none"> Potential at some sites for no AWO presence. 	W

Critical control point	Control measure	Compliance procedure	Compliance systems and documents	Potential strengths (S), weaknesses (W) and gaps (G) in current compliance	
	Livestock are handled by competent stock handlers in a manner that avoids injury and minimises stress.	<ul style="list-style-type: none"> All personnel interacting with livestock have been trained on the company's SOPs. Supervisory staff are onsite to apply corrective measures if necessary. 	<ul style="list-style-type: none"> SOPs Animal Handler Training Log Standard Compliance Model AWO Checklist – Internal Monitoring Program AWO 	<ul style="list-style-type: none"> SOPs are generally utilised. 	S
				<ul style="list-style-type: none"> Good adoption of handler training. 	S
				<ul style="list-style-type: none"> Potential for multiple butchers and high staff turnover. 	W
				<ul style="list-style-type: none"> AWO presence. 	S
				<ul style="list-style-type: none"> AWO placement varies - specific/dedicated AWO always onsite, roving AWO between different sites. 	W
				<ul style="list-style-type: none"> Potential at some sites for no AWO presence. 	W
	Livestock are retained within an ESCAS approved supply chain.	<ul style="list-style-type: none"> Consignments are segregated within lairage. Pen movements are recorded where livestock are held in lairage for an extended time. Animals that arrive are individually identified and have their identification 	<ul style="list-style-type: none"> SOPs Pen movement reports Standard Compliance Model AWO Checklist – Internal Monitoring Program AWO installed at abattoir 	<ul style="list-style-type: none"> AWO presence. 	S
				<ul style="list-style-type: none"> AWO placement varies - specific/dedicated AWO always onsite, roving AWO between different sites - potential inconsistencies. 	W
				<ul style="list-style-type: none"> Potential at some sites for no AWO 	W

		<p>device present (cattle).</p> <ul style="list-style-type: none"> • Lost identification devices are replaced and recorded (cattle). • Traceability reports are maintained so that the locations of all individual animals in a consignment are known at any point in time and are able to be reported. • Records of mortalities are maintained. 		<p>presence.</p> <ul style="list-style-type: none"> • Risk analysis has identified and addressed risks associated with ESCAS/non-ESCAS shared facilities. 	S
Critical control point	Control measure	Compliance procedure	Compliance systems and documents	Potential strengths (S), weaknesses (W) and gaps (G) in current compliance	
Moving animals to slaughter	Facilities and equipment are appropriate for the effective handling of livestock so as to ensure the welfare of the animal is not compromised.	<ul style="list-style-type: none"> • Facilities and equipment are inspected prior to movement commencing. 	<ul style="list-style-type: none"> • SOPs • Animal Handler Training Log • Preliminary Lairage Inspection Report • Preliminary Abattoir Inspection Report • Daily Lairage Inspection Report • Daily Abattoir Inspection Report • Standard Compliance Model AWO Checklist – Internal Monitoring Program 	<ul style="list-style-type: none"> • Gap analysis and guidance documentation for ESCAS compliance has delivered appropriate facilities. • Ongoing need for maintenance. • Lack of consistent contingency plan/ protocol to address issues identified during the inspection. 	S W G
	Livestock are handled by competent stock handlers in a manner that avoids injury and minimises stress.	<ul style="list-style-type: none"> • All personnel interacting with livestock have been trained on the company's SOPs. • Supervisory staff are onsite to apply corrective measures if necessary. 	<ul style="list-style-type: none"> • SOPs • Animal Handler Training Log • AWO nightly report OR • Standard Compliance Model AWO Checklist – Internal Monitoring Program • Weekly Abattoir Report • AWO 	<ul style="list-style-type: none"> • SOPs are generally utilised. • Good adoption of handler training. • Presence of the AWO. • AWO placement varies - specific/dedicated AWO always onsite, Roving AWO between different sites - potential for inconsistencies. • Potential in some sites for no AWO presence. 	S S S W W
	Abattoir management	<ul style="list-style-type: none"> • Supervisory staff are onsite to apply 	<ul style="list-style-type: none"> • SOPs 	<ul style="list-style-type: none"> • SOPs are generally utilised. 	S

	operations are such that ensure the welfare of the animal is not compromised.	corrective measures if necessary.	<ul style="list-style-type: none"> AWO nightly report OR Standard Compliance Model AWO Checklist – Internal Monitoring Program Contract between abattoir and feedlot AWO 	<ul style="list-style-type: none"> Good adoption of handler training. AWO presence. AWO placement varies - specific/dedicated AWO always onsite, roving AWO between different sites. Potential at some sites for no AWO presence. 	<p>S</p> <p>S</p> <p>W</p> <p>W</p>
Critical control point	Control measure	Compliance procedure	Compliance systems and documents	Potential strengths (S), weaknesses (W) and gaps (G) in current compliance	
Slaughter operation with stunning	Facilities and equipment are appropriate for the effective stunning and slaughter of livestock so as to ensure the welfare of the animal is not compromised.	<ul style="list-style-type: none"> Facilities and equipment are inspected prior to slaughter commencing. 	<ul style="list-style-type: none"> SOPs AWO nightly report OR Standard Compliance Model AWO Checklist – Internal Monitoring Program Stunner Maintenance Log Contingency Plan for Stunner Failure Backup power generators Backup stunners AWO 	<ul style="list-style-type: none"> Gap analysis and guidance documentation for ESCAS compliance has delivered appropriate facilities. Variability in ownership of facility. Ongoing need for maintenance. Lack of consistent contingency plan/ protocol to address issues identified during the inspection. Power generators for backup power and backup stunners in most facilities. 	<p>S</p> <p>W</p> <p>W</p> <p>G</p> <p>S</p>
	Livestock are stunned by competent stunner operators in a manner that effectively and reliably renders the animal unconscious to prevent suffering until it dies from blood loss.	<ul style="list-style-type: none"> All personnel interacting with livestock have been trained on the company's SOPs. Supervisory staff are onsite to apply corrective measures if necessary. Re-stun or use alternative stunner if initial stun is ineffective. 	<ul style="list-style-type: none"> SOPs Animal Handler Training Log AWO nightly report OR Standard Compliance Model AWO Checklist – Internal Monitoring Program Daily Abattoir Inspection Report Weekly Abattoir Report Contingency Plan for Stunner Failure CCTV in some facilities 	<ul style="list-style-type: none"> SOPs are generally utilised, SOPs include procedures for ineffective stun. Good adoption of handler training. Presence of AWO. Backups for power and stunners in most facilities. AWO placement varies - specific/dedicated AWO always onsite, roving AWO between different sites. 	<p>S</p> <p>S</p> <p>S</p> <p>S</p> <p>W</p>

			<ul style="list-style-type: none"> • Backup power generators • Backup stunners • AWO 	<ul style="list-style-type: none"> • Potential at some sites for no AWO presence. 	W
--	--	--	---	--	---

Critical control point	Control measure	Compliance procedure	Compliance systems and documents	Potential strengths (S), weaknesses (W) and gaps (G) in current compliance	
	Livestock are slaughtered by competent slaughterman in a calm and effective manner and that minimises suffering.	<ul style="list-style-type: none"> • All personnel interacting with livestock have been trained on the company's SOPs. • Supervisory staff are onsite to apply corrective measures if necessary. • Back up procedures in case of failure to bleed out. 	<ul style="list-style-type: none"> • SOPs • Animal Handler Training Log • AWO nightly report OR • Standard Compliance Model AWO Checklist – Internal Monitoring Program • Contingency Plan for Stunner Failure • CCTV in some facilities • Spare sharp knife • AWO 	<ul style="list-style-type: none"> • SOPs are generally utilised including procedures for failure to bleed out. 	S
				<ul style="list-style-type: none"> • Good adoption of handler training . 	S
				<ul style="list-style-type: none"> • Multiple butchers and slaughtermen with varying experience and skill level. 	W
				<ul style="list-style-type: none"> • High staff turnover. 	W
				<ul style="list-style-type: none"> • Presence of AWO. 	S
				<ul style="list-style-type: none"> • AWO placement varies - specific/dedicated AWO always onsite, roving AWO between different sites. 	W
				<ul style="list-style-type: none"> • Potential at some sites for no AWO. 	W
	Livestock are retained within an ESCAS approved supply chain.	<ul style="list-style-type: none"> • All animals are recorded as dead. • Total slaughter numbers per facility reported back to the feedlot or importer and reconciled against the number consigned. • EID devices scanned upon death or device is read manually, collected and returned to feedlot/ importer for destruction (cattle). • Slaughter reports are compiled by the importer based on the records supplied to them by the abattoir and these are supplied to the 	<ul style="list-style-type: none"> • SOPs • EID device data file (cattle) • End of Processing Report (cattle) • Contract between abattoir and feedlot 	<ul style="list-style-type: none"> • EID devices not always removed and returned to importer/destroyed (cattle). 	W
				<ul style="list-style-type: none"> • No consistent documents/reporting of slaughter information between abattoir-feedlot-importer-exporter. 	G
				<ul style="list-style-type: none"> • Manual transcription of devices is subject to human error. 	W
				<ul style="list-style-type: none"> • Technological issues with scanners. 	W

		<p>exporter as required (weekly, fortnightly or monthly).</p> <ul style="list-style-type: none"> Records are maintained by the exporter (Excel or Access). Each consignment is fully reconciled and closed with the End of Processing Report (cattle). 			
Critical control point	Control measure	Compliance procedure	Compliance systems and documents	Potential strengths (S), weaknesses (W) and gaps (G) in current compliance	
Slaughter operation without stunning	Facilities and equipment are appropriate for the effective slaughter of livestock so as to ensure the welfare of the animal is not compromised.	<ul style="list-style-type: none"> Facilities and equipment are inspected prior to slaughter commencing. 	<ul style="list-style-type: none"> SOPs Animal Handler Training Log AWO nightly report OR Standard Compliance Model AWO Checklist – Internal Monitoring Program Backup power generator in case of power failure affecting operation of restraining devices. 	<ul style="list-style-type: none"> Gap analysis and guidance documentation for ESCAS compliance has delivered appropriate facilities. 	S
				<ul style="list-style-type: none"> Variability in ownership of facility. Ongoing need for maintenance. Presence of AWO. AWO placement varies - specific/dedicated AWO always onsite, roving AWO between different sites. Potential at some sites for no AWO presence. Lack of consistent contingency plan/ protocol to address issues identified during the inspection. 	W W S W W G
	Livestock are restrained humanely by competent operators in a manner that minimises suffering.	<ul style="list-style-type: none"> All personnel interacting with livestock have been trained on the company's SOPs. Supervisory staff are onsite to apply corrective measures if necessary. 	<ul style="list-style-type: none"> SOPs Animal Handler Training Log Daily Abattoir Inspection Report Weekly Abattoir Report AWO nightly report OR Standard Compliance Model AWO Checklist – Internal Monitoring Program AWO 	<ul style="list-style-type: none"> SOPs are generally utilised. Good adoption of handler training. Presence of AWO. AWO placement varies - specific/dedicated AWO always onsite, roving AWO between different sites. Potential at some sites for no AWO. 	S W S W W

			<ul style="list-style-type: none"> Backup power generator in case of power failure affecting operation of restraining devices. 		
--	--	--	---	--	--

Critical control point	Control measure	Compliance procedure	Compliance systems and documents	Potential strengths, weaknesses and gaps in current compliance	
	Livestock are slaughtered by competent slaughterman in a calm and effective manner that minimises suffering.	<ul style="list-style-type: none"> All personnel interacting with livestock have been trained on the company's SOPs. Supervisory staff are onsite to apply corrective measures if necessary. Back up procedures in case of failure to bleed out. 	<ul style="list-style-type: none"> SOPs Animal Handler Training Log Daily Abattoir Inspection Report Weekly Abattoir Report AWO nightly report OR Standard Compliance Model AWO Checklist – Internal Monitoring Program AWO 	<ul style="list-style-type: none"> SOPs are generally utilised including procedures for failure to bleed out. Good adoption of handler training. Multiple butchers and slaughtermen. High staff turnover. Presence of AWO. AWO placement varies - specific/dedicated AWO always onsite, roving AWO between different sites. Potential at some sites for no AWO. 	<p>S</p> <p>S</p> <p>W</p> <p>W</p> <p>S</p> <p>W</p> <p>W</p>
	Livestock are retained within an ESCAS approved supply chain.	<ul style="list-style-type: none"> All animals are recorded as dead. Total slaughter numbers per facility reported back to the feedlot or importer and reconciled against the number consigned. EID devices scanned upon death or device is read manually, collected and returned to feedlot/importer for destruction (cattle). Slaughter reports are compiled by the importer based on the records supplied to them by the abattoir and these are supplied to the exporter as required (weekly, fortnightly or monthly). Records are maintained by the exporter (Excel or 	<ul style="list-style-type: none"> EID device data file (cattle) End of Processing Report (cattle) Standard Compliance Model AWO Checklist – Internal Monitoring Program 	<ul style="list-style-type: none"> EID devices not always removed or returned to importer (cattle). No consistent documents/reporting of slaughter information between abattoir-feedlot-importer-exporter. Manual transcription of EID device is subject to human error. Technological issues with scanners. 	<p>W</p> <p>G</p> <p>W</p> <p>W</p>

		Access). <ul style="list-style-type: none">• Each consignment is fully reconciled and closed with the End of Processing Report (cattle).			
--	--	--	--	--	--

3.3.1. Self-reporting

The industry and Government are in favour of self-reporting; however, there is a divergence of opinion regarding how instances of self reported non-compliance should be treated. The uptake and effectiveness of self-reporting has been compromised by the circumstances surrounding one particular instance of self-reporting which allegedly resulted in the imposition of a non-compliance penalty equal to that which may have been applied were the non-compliance reported by a third-party.

3.3.2. Variation by market

Variations to the list provided in Table 3 are summarised below:

- Malaysia - Most goats are slaughtered on ESCAS approved farms with the balance slaughtered in government abattoirs where the facility is leased by the importer.
- Egypt - Closed supply chain.
- Others under negotiation including Japan, Russia and Saudi Arabia.

3.3.3. Discussion with DAFF

During the course of the research, a meeting was held with the Live Animal Export Division, Animal Export Reform Branch of the Australian Government Department of Agriculture, Fisheries and Forestry (DAFF).

Several important issues affecting the implementation of ESCAS were discussed and the following clarification was provided by DAFF:

- **Audit duplication**

Exporters may (directly or through importers) collaborate in the auditing of facilities to reduce audit duplication. Wherever there is the common use of facilities throughout the supply chain there is the opportunity for collaboration.

Livestock from each supply chain do not necessarily have to be in the facility at the time of the audit provided there are no significant differences between the supply chains in:

- The type of livestock being supplied (for example: *Bos taurus* vs *Bos indicus* vs dairy cattle; cattle vs sheep or goats).
- The way the animals are handled within the supply chain (different staff, restraint or slaughter methods).

Issues of non-compliance would be dealt with on a case by case basis; however, it is likely that all exporters collaborating under a shared audit arrangement would be affected in the event of a non-compliance associated with a shared facility unless it could be demonstrated that the non-compliance was unique to a specific supply chain.

- **Quality assurance**

DAFF indicated it was in favour of the development and implementation of an industry initiated QA program to provide industry with assurance. This should be independent of regulation but would, through its existence and according to the Farmer Review, complement the regulatory framework.

DAFF considers that a well designed QA program would offer the most effective mechanism for managing the delivery of a desirable animal welfare outcome during the period between audits (the "inter-ESCAS audit gap"). The need for industry to demonstrate its ability to control this inter-ESCAS audit period has become more acute following recent alleged and proven instances of non-compliance.

A centralised database or data management system was considered by DAFF to be a valuable complement to a QA program, although DAFF would neither desire nor expect to have access to any such database. This would offer particular advantages in standardising reporting, including ensuring the completeness of reporting and demonstrating the implementation of SOPs and SOP training.

- **Risk assessment**

Industry initiated risk assessment and compliance management tools were considered by DAFF to be useful resources for exporters to assist in managing risk and to potentially complement and influence the implementation of a broader QA program.

A risk assessment model alone was never envisaged by DAFF as sufficient to underpin its decision making process regarding future audit regimes/frequency for exporters. It was always considered by DAFF management as contributing to and being a part of a broader QA program which is currently being developed by industry.

3.4. Conclusions

The systems and procedures which have been implemented by industry and exporters to support conformance with ESCAS requirements are generally informal in nature.

In the majority of cases, the systems and procedures exporters have introduced have had at their centre resources developed by industry, such as standard operating procedures and reporting templates.

Systems and procedures to facilitate compliance with the traceability, control and animal welfare requirements of ESCAS are typically standardised within supply chains but differ between supply chains. This creates difficulties where a unit is shared by supply chains and each supply chain is employing different systems and procedures.

The majority of CCPs have appropriate control measures, compliance procedures and compliance systems in place to mitigate the risk of non-compliance with ESCAS. Gaps and weakness do, however, exist:

- Record keeping and documentation formats are inconsistent across supply chains.
- Third parties are engaged at various points in the supply chain who may not appreciate the significance of compliance with ESCAS requirements or may not have received appropriate training.
- Human error is likely, such as in maintaining traceability records.
- The interpretation of ESCAS requirements differs between auditors.
- Inconsistent protocols to determine how compliance procedures should be conducted, where, when and by whom are applied.
- A lack of protocols exist to address compliance issues which have been identified.
- There is a lack of protocols for truck drivers and the possibility that drivers are not experienced in transporting livestock.
- Service levels may not be specified in contracts between supply chain participants.
- Appropriate supervision may not be in place at all CCPs.
- Requirement at all points for ongoing maintenance - requires commitment from facility owner.
- The potential for EID malfunctions.
- Without agreement to concessions or the offering of incentives, there is little chance that self-reporting will be adopted in a meaningful way by industry.

While weaknesses and gaps exist, they may be minimised or mitigated through the introduction of further standardised protocols, procedures and instructional materials.

4. Cost of compliance

The project required that the cost of compliance with the current ESCAS framework be examined such that economic cost changes associated with the introduction of a risk management/QA model may be assessed.

The derivation of an accurate assessment of the economic cost of compliance was complicated in that:

1. Exporters were not able to isolate all of the costs associated with ESCAS compliance.
2. Costs were often shared along convoluted international supply chains and the disclosure and understanding of these costs was often incomplete.
3. The staged implementation of ESCAS and changing nature of the audit and administration systems meant that ongoing costs had not yet been established.

The estimate of the economic cost of compliance provided within this report represents the mode (the number reported most frequently in a sample) cost of compliance across the sample of exporter supply chains based on the information supplied by industry and Government and is considered to be a reasonable estimate.

4.1. Defining compliance costs

The project required the examination of the cost of compliance with the current ESCAS framework (including application and ongoing components), the identification of key areas of burden for exporters (including documentation burden) and the assigning of an economic value to all components identified.

It was not possible to assign a specific economic value to all components identified for the reasons stated in Section 4 and because the exporters had not analysed costs to the extent required to perform such an analysis.

In fully appreciating the costs associated with ESCAS compliance, other costs, besides economic cost were also considered. These were:

1. Time cost,
2. Opportunity cost, including that arising from loss of market access, and
3. Psychological cost.

4.1.1. Assumptions and scope

In undertaking this analysis, it has been assumed that the cost of compliance, for the purpose of the report, is limited to the direct costs of compliance with ESCAS requirements incurred by the supply chain.

It is acknowledged that significant direct (such as program support) and indirect (such as redirected resources) costs have been incurred by industry bodies such as MLA, LiveCorp and peak councils, as well as the Australian Government; however, these have not been factored into the cost of compliance reported here within and are considered to be beyond the scope of the project.

4.1.2. Measuring compliance costs

In the case of ESCAS, the analysis of the economic cost of compliance includes money paid to internal and external staff and advisors as well as fees. While beyond the scope of the project, three other cost categories have also been considered to allow for a truer appreciation of the cost of compliance.

While the introduction of a QA program may not clearly deliver direct economic benefits in the short-term through reduce direct costs (the introduction of QA is likely to add to direct costs in the short-term), a reduction in the following indirect costs may be experienced:

- **Time**
Time spent by business owner but not accounted for as a direct economic cost.
- **Opportunity cost**
The cost associated with not undertaking other business activities due to the cost (direct or indirect) involved with maintaining compliance.
- **Psychological**
While difficult to quantify and relate in economic terms and beyond the scope of this project, the primary research has revealed a significant psychological cost throughout the supply chain.

4.1.3. Prior research

There was no evidence to suggest that the cost of compliance with live export regulations and requirements, either pre or post ESCAS, had previously been investigated nor a precedent established to guide such work.

4.1.4. Process of being compliant

The various procedures adopted by supply chains to facilitate compliance are outlined in section 3.

These procedures were typically implemented through several strategies and often through a combination of these strategies:

1. Ownership of compliance functions whereby management would take on additional compliance obligations

Ownership of compliance functions whereby staff, typically management, takes on additional compliance obligations is a strategy typically employed by exporters consigning smaller numbers of livestock.

This process minimises direct economic costs but increases the time cost and often the opportunity cost and psychological cost.

This strategy was used by the majority of goat exporters.

2. Brokerage of compliance functions whereby compliance tasks were brokered to specialised staff brought on for the task, incumbent staff or outsourced to a third-party

Larger exporters of sheep and cattle typically brokered compliance functions to newly engaged staff brought on to serve a specific function or incumbent staff with appropriate skills. The primary brokered services related to data management to satisfy traceability requirements within cattle supply chains and supply chain management to oversee ESCAS compliance in market.

3. Use of computerised systems to assist with record keeping and reporting

All exporters have adopted some form of data management system. These systems vary in complexity from Excel spreadsheets through to Access databases and custom built packages. The primary function of these systems is traceability, although some have been extended to alert the exporter to important reporting dates.

4.1.5. Attitude toward compliance

The attitude to compliance influences the exporter's propensity to abide by regulations and requirements as well as the effectiveness of alternative approaches, such as self-reporting. This also has a bearing on the psychological cost of compliance. The exporter's attitude may be based on firsthand experience but may also be influenced by myth or misperception.

Understanding exporter's attitudes toward ESCAS and the extent to which this attitude had been influenced by compliance activities can offer an insight into compliance behaviour which may influence program implementation and communication.

4.1.6. Research methodology

The research approach adopted in establishing the cost of compliance was primarily qualitative, complemented by quantitative research where data was available.

In-depth interviews were conducted on a face-to-face basis with twelve live exporters. These exporters were selected on the basis that they make up the majority of exporters covering the majority of markets and are responsible for the vast majority of cattle, buffalo, sheep and goats exported from Australia.

A series of standard questions addressing the research requirement were emailed to the exporter prior to the interview and these questions were then addressed during the interview. These are attached as Appendix 1.

Open and frank discussions were had on the basis that no identifying information or data would be reported and all reported data would be socialised. Subsequent telephone conversations to qualify and quantify particular facts were undertaken with most exporters.

Economic costs associated with the application process and ongoing compliance charged by DAFF were reported by the exporters and verified with DAFF.

Discussions also took place with MLA managers based in North Sydney, Indonesia and the Middle East. These discussions served to add further context to the industry consultation.

4.1.7. Cost of compliance findings

Table 4 summarises the findings of the research and outlines the three most costly compliance activities as identified by each of the interviewed exporters.

Based on the research, the following theories regarding cost of compliance have been constructed:

1. The species exported by the live exporter influences compliance cost and costs are not consistent across all species or markets.
2. Compliance cost is regressive and influenced by the nature and scale of the business.
3. Exporters are willing to broker assistance to achieve compliance.
4. Where exporters were willing to cooperate with respect to audit scheduling, economic compliance costs were reduced.
5. Computerised data management systems can assist with compliance and reduce compliance cost.
6. The attitude of the exporters toward ESCAS impacts the psychological cost of compliance and has diminished the potential for self-reporting.
7. Some costs of compliance are transferable through the supply chain.
8. Direct and incidental benefits from compliance have been delivered within some supply chains, especially with respect to supply chain knowledge and animal welfare.
9. The cost of compliance with ESCAS has yet to be fully realised due to the staged introduction of ESCAS.

The allocation of specific economic costs to specific compliance procedures was not possible for the reason stated previously and due to the inconsistent nature of the treatment of costs within and between supply chains. Socialised estimates of the economic cost of production per head are presented in Table 5.

Table 4: Three most costly compliance activities

Exporter	Most costly compliance activity			Nature of cost	Comment
	1	2	3		
1	Auditing	Traceability, data management	DAFF interaction, variations	Monetary, time	<p>Auditing is the most costly monetary compliance procedure and is seen to deliver no useful feedback.</p> <p>Data management is the most costly requirement from a time and psychological perspective.</p> <p>The lack of tolerance with respect to traceability is seen to be unworkable, beyond any such requirement or reasonable expectation in Australia.</p>
2	Loss of business	Audits	Data management, traceability	Opportunity, monetary	<p>Opportunity cost substantial through loss of business (approximately 60% downturn in trade).</p> <p>Opportunity cost will extend in that ESCAS in its current form will not be able to cope with larger volumes of cattle and will restrict trade expansion.</p> <p>Independent audit regime “woeful”. Unskilled auditors delivering substandard reports.</p>
3	Audits	Administration (traceability)	ESCAS fees	Monetary	<p>Audits are delivering no useful information (therefore no continual improvement).</p> <p>Significant brokered labour cost to maintain traceability and processes involved with ESCAS application and ongoing compliance</p>

Exporter	Most costly compliance activity			Nature of cost	Comment
	1	2	3		
4	Audits	Administration (in market staff)		Monetary	<p>Cost of audits seen to be a waste of money in that no benefit was derived through useful feedback and the competence of the auditors was brought into question.</p> <p>Circumstances around the audit could be orchestrated.</p> <p>Require highly visual communication tools in market to support compliance with SOPs – important to show what is NOT allowed.</p> <p>Laminated, translated copies of checklist useful.</p>
5	Administration	Fees		Monetary	<p>Inefficiencies in compliance reporting. Interaction with DAFF frustrating and costly.</p> <p>Different interpretation of fundamental compliance requirements by different individuals within DAFF.</p> <p>ESCAS being used by importers as leverage against exporters.</p>
6	Administration	Traceability		Psychological, time, monetary	<p>Maintaining traceability in accordance with tolerances. In market supply chain manager was seen as a significant cost.</p> <p>Traceability compliance requirement exceeds that which is expected in Australia and does not allow for human error which is considered unreasonable.</p> <p>In-market hostility</p>

Exporter	Most costly compliance activity			Nature of cost	Comment
	1	2	3		
7	Administration			Monetary	Able to pass costs on to importers.
8	Loss of business at peak festival slaughter times	Freight and feed associated with holding livestock longer in market	Audits	Opportunity, monetary, time, psychological	<p>Reduced volumes being able to be managed through accredited supply chains at traditionally high volume festival periods.</p> <p>ESCAS was creating a very significant bottleneck at point of slaughter during festivals resulting in greatly reduced volumes being able to be processed and very specific times. This volume could not be transferred to other times of the year given the specific nature of the festival.</p> <p>Other costs included in market infrastructure improvements.</p>
9	Audits	Business negotiations and compliance management to retain market access	Administration including in market compliance management and traceability	Monetary, opportunity, time, psychological	<p>Audits represent the greatest liability for the industry as they are not serving to correct or identify issues.</p> <p>Auditor competence and conduct biggest issue.</p> <p>Potential loss of major market due to an inability or unwillingness to comply with ESCAS.</p> <p>Shortage of auditors in high audit volume markets has led to minor non-compliances and additional costs.</p>

Exporter	Most costly compliance activity			Nature of cost	Comment
	1	2	3		
10	Administration	Audits	Fees	Monetary, time	<p>Little scope for further cost increases.</p> <p>Costs have been absorbed both by exporter and importer.</p> <p>Full economic cost of compliance yet to be realised or stabilise.</p>
11	Loss of market access/share to competing exporter/countries	Administration - resources/audit fees	DAFF processes	Monetary – profit loss	<p>Competing countries do not have to comply with welfare standards.</p> <p>Inconsistency in DAFF determination.</p> <p>DAFF processing/response time.</p> <p>Strain on customer relationship and associated weaker negotiating position.</p>
12	Administration, including fees	Audits		Monetary	<p>DAFF correspondence inconsistent, time consuming and costly, particularly in relation to variations to ESCAS.</p> <p>Administration of both ESCAS and traceability very labour intensive.</p>

4.1.8. Discussion of findings

The theories formed based on the research are discussed below:

- **The species exported by the live exporter influences compliance cost or burden and costs are not consistent across all species**

Compliance costs were found to vary significantly between species but remained relatively constant within species with the influence of different markets having little impact on the cost of compliance. The greatest variation in cost between species was due to the different traceability requirements between sheep and goats, and cattle and buffalo. The requirement for individual traceability for cattle and buffalo added significant costs to the supply chain through increased reporting and data management.

The greatest burden associated with ESCAS compliance in cattle supply chains was observed to be traceability and the greatest cost of ESCAS; loss of business.

The greatest burden associated with ESCAS compliance in sheep supply chains was observed to be administration and the greatest cost of ESCAS; audits.

- **Compliance cost is regressive and influenced by the nature and scale of the business**

Compliance cost was found to be regressive with larger supply chains able to benefit from economies of scale. Audit, reporting costs and fees were found to remain relatively constant within a market regardless of the number of animals. This is best demonstrated by the difference in ESCAS compliance cost (without considering other costs such as transport) between sheep exported by sea (\$0.77) and sheep exported by air (\$13.00) with the key ESCAS compliance cost variant being the number of animals across which the cost is shared. While these costs are not directly comparable as they relate to different markets and are subject to different variables, they do serve to illustrate the point.

- **Exporters are willing to broker assistance to achieve compliance**

Exporters supplying larger numbers of livestock tended to broker services domestically to assist with compliance. This was achieved by engaging third-party assistance, recruiting staff to undertake the task or job sharing through suitably skilled incumbent staff. These staff were typically dedicated to administrative and reporting tasks. Within cattle supply chains, traceability and associated data management was reported as being particularly labour intensive.

Supply chains handling smaller numbers of livestock tended to manage compliance obligations internally without brokering services; a practice which added significantly to the time cost associated with the businesses. This was particularly pronounced in the goat sector.

Services were also brokered in-market through the appointment of individuals as supply chain managers to facilitate compliance.

- **Where exporters were willing to cooperate with respect to audit scheduling, compliance economic costs were reduced**

While very few exporters were found to cooperate and there was significant uncertainty regarding the extent to which they were able to cooperate under the existing regulations, those that were cooperating were realising significant efficiencies and cost savings. Cost sharing agreements had been negotiated and savings passed on. This was particularly the case in the goat sector.

- **Computerised data management systems can assist with compliance and reduce compliance cost**

Computerised data management systems have been introduced and are essential in the cattle sector given the individual animal traceability requirements. The sophistication of these systems tended to increase as the number of cattle handled within a supply chain increased; ranging from Excel spreadsheets through to customised software packages. Excel was not considered capable of managing the requirements of larger, more complex supply chains.

The reduced complexity of the sheep and goat traceability requirement translated to less complex data management systems. Excel was generally accepted as being adequate.

The data management systems currently being utilised typically serve to manage traceability and, in some cases, issue reminders of important reporting dates. The automation of other tasks beyond these basic functions was not observed.

Exporter attitudes toward the introduction of a centralised, highly functional database varied from being overcomplicated and unnecessary (sheep and goats) to redundant in that customised systems had already been developed for those supply chains requiring such systems. Some benefit was recognised in that such a system may allow for automated reporting, such as the generation of End of Processing reports for cattle, and issue reminders relating to DAFF reporting deadlines. The requirement to report traceability data to a central database would be resisted by exporters.

- **The attitude of the exporter toward ESCAS impacts the psychological cost of compliance and has diminished the potential for self-reporting**

Exporter attitude was assessed on the basis that this may directly contribute to psychological cost and provide an indication of the willingness of the exporter to adopt new practices that may influence cost, such as self-reporting or reporting to a centralised data management system. The attitude of exporters varied considerably from one of disgust and resentment through to acceptance and even acknowledgement of the benefits ESCAS was delivering.

In general, exporters accept that ESCAS governs the way they do business. They are now seeking ways to make compliance more efficient and, where possible, add value to their businesses, for example, through the delivery of more efficient streamlined supply chains.

Of particular concern is the audit system which exporters see as carrying a significant cost but delivering no practical benefit, except in the role that it plays in providing a social licence to trade.

During interviews, exporters also expressed concern regarding current self-reporting due to rumours regarding the treatment of supply chains which have previously self-reported. That is, self-reporting has resulted in similar sanctions to those which would otherwise be applied if the non-compliance was discovered by a third-party (animal activist).

- **Some costs of compliance are transferable through the supply chain**

Quantifying the economic costs associated with ESCAS compliance was complicated by the various informal and formal cost sharing arrangements which had been negotiated within supply chains. Exporters had generally sought to transfer costs to the importer, except where there was an interest in retaining proprietary. The degree to which they had been able to do so was typically influenced by the relationship between the exporter, the importer and other entity's within the supply chain.

The primary cost in question, when considering cost sharing, is the audit cost. Larger supply chains typically had more success in passing this cost on to the importer and, in some markets, the importer saw the ownership of the audit as being advantageous in that it allowed them to compete more effectively for livestock from multiple exporters.

In market costs associated with supply chain management were borne by the exporter while costs associated with routine reporting and monitoring, such as that undertaken by Animal Welfare Officers, were borne by the in-market facility or importer.

The cost of major infrastructure upgrades to facilitate ESCAS compliance were shared on a case by case basis but typically involved some form of cost sharing between the exporter and importer. Ongoing maintenance is typically the responsibility of the importer.

- **Direct and incidental benefits from compliance have been delivered within some supply chains**

Exporters generally acknowledge that ESCAS compliance has delivered direct and incidental benefits. The most direct benefits have been the extension of a social licence to trade and an appreciable improvement in animal welfare.

Indirect benefits are less consistent and obvious but include more integrated and secure supply chains and greater premiums (in some markets) driven by reduced supply.

- **The cost of compliance with ESCAS has yet to be fully realised due to the staged introduction of ESCAS**

Due to the staged introduction of ESCAS and modifications to the audit regime, the ongoing cost of compliance with ESCAS has yet to be fully realised. Tranche 2 and 3 countries have not yet been in operation for 12 months and the audit regime post 12 months for Tranche 1 countries is yet to be implemented.

4.1.9. Quantitative analysis

Each exporter was asked to estimate the economic cost of compliance with ESCAS. In providing this information, the exporters were asked to include all costs directly associated with ESCAS compliance throughout the supply chain, including costs associated with the application process through to ongoing compliance.

Table 5 provides a summary of the economic cost per head of compliance with ESCAS as reported by the exporters. This demonstrates that most ESCAS costs are fixed and that the greater the number of livestock handled through a supply chain, the lower the cost per head.

Table 5: Economic cost per head of compliance with ESCAS

Species	Method	High	Low	Mode*
Cattle	Boat	\$45.00	\$8.00	\$9.00
Sheep	Boat	\$0.77	\$0.77	\$0.77
Sheep	Air	\$10.00	\$14.00	\$13.00
Goats	Air	\$10.00	\$14.00	\$13.00

*The mode represents the number that was represented most often in the sample.

Variation in the cost of compliance between markets within a species was not reported to be significant as the compliance requirements were the same.

4.2. Conclusions

To fully appreciate the cost of compliance with ESCAS requirements, monetary, time, opportunity and psychological costs need to be considered. The impact of these costs varies across species and supply chains, as does the ability to transfer these costs throughout the supply chain. Larger exporters tend to incur more economic costs by brokering compliance activities whereas smaller exporters absorb economic costs, resulting in greater time and psychological costs.

The derivation of an accurate assessment of the economic cost of compliance was complicated by several factors:

1. Exporters were not able (or prepared) to isolate and report all costs associated with ESCAS compliance.
2. Costs were often shared along convoluted international supply chains and the disclosure and understanding of these costs was often incomplete.
3. The staged implementation of ESCAS and changing nature of the audit and administration systems meant that ongoing costs had not yet been established.

Several themes were, however, able to be identified:

1. The economic cost of compliance is regressive with fixed costs shared over more livestock in larger markets or by exporters consigning larger numbers.

2. The greatest burden associated with ESCAS compliance in cattle supply chains was observed to be traceability and the greatest cost of ESCAS; loss of business.
3. The greatest burden associated with ESCAS compliance in sheep supply chains was observed to be administration and the greatest cost of ESCAS; audits.

Direct and incidental benefits of ESCAS compliance are recognised by exporters including attaining a social licence to trade, animal welfare benefits and supply chain efficiency and integration benefits.

The project objectives suggested that the cost of compliance may be used as benchmark against which any economic cost changes associated with the introduction of a QA and risk management/QA model may be assessed.

While KPIs could be assigned based on the cost estimates provided in 4.1.9, such KPIs would not account for the full cost of compliance as this is yet to be realised.

The introduction of a QA and risk management model may well increase the economic cost of compliance but may also provide greater assurance and support the continuation of the trade, thus reducing or mitigating less direct costs of compliance and potentially the costs associated with trade disruption. As such, economic cost changes alone should not be used as an indicator of the success or otherwise of a risk management or QA program.

5. Review of other QA and risk management programs

The project required a review of QA and risk management programs from industries other than livestock export.

Ten non-livestock export QA and/or risk management programs were reviewed in detail. A further 17 programs, manuals, reports, guides and documents were also reviewed.

The Livestock Export Accreditation Program (LEAP) was also reviewed; however, this holds little direct relevance to this project as LEAP was applicable pre-market whereas the QA program under consideration is post-disembarkation in market.

5.1. Program selection

Programs and literature reviewed through the secondary research were selected based on the following characteristics:

- Renowned as best practice
- Whole-of-chain approach
- Issues relating to high level of risk (ie safety)
- Complex supply chains
- Relevance and applicability
- Accessibility of information

The research also considered the implication of other program characteristics such as whether the program:

- Delivered certification, accreditation or registration
- Had international or domestic application
- Could be applied at unit and/or supply chain

5.2. Research methodology

This component of the project utilised desktop research. A number of online libraries, databases and websites were interrogated for reference to QA and risk management programs.

Once a program was identified, further desktop research was undertaken to obtain specific standards, rules and manuals for analysis. These were then reviewed based on the selection criteria outlined in section 5.1. Any items that were determined to meet any or all of the selection criteria were then assessed in detail.

While the majority of information associated with QA and risk management programs was available free of charge, some subscriptions were required to online libraries and databases.

In cases where a useful volume of information on a program could not be obtained, the program was not reviewed.

Specific sources of information included:

- SAI Global Library
- International Organization for Standardization (ISO) database
- Australian Standards database
- IP Australian certification program database
- International Register of Certified Auditors
- Social Science Research Network
- International Accreditation Forum Inc's website
- American Society for Quality website
- JAS-ANZ website
- ISO website
- Program owners websites
- Emerald online journal database
- International Journals on quality systems and risk management
- Informal, personal communication with four certification bodies

5.3. Findings

An appraisal of the ten programs reviewed in detail and the 17 additional resources identified in Section 2 are reported in the following findings.

5.3.1. Structure of a QA program

Robust QA programs involve a universally accepted approach to QA. This is generally based on ISO guidelines, principles and terminology (ISO 9001:2008) and includes formal methods for:

- The development and implementation of a quality plan, procedures, manual, policy and templates.
- Control mechanisms for ensuring documents and records are kept and used in line with the quality management protocols.
- The use of a management system to manage the documents and records required to demonstrate conformance with the overall program.
- Monitoring and review processes.
- Applying conformance measures including types of non-conformance, reporting of conformance issues, corrective actions.

5.3.2. Structure of a risk management program

Robust risk management systems involve a universally accepted approach to risk management. This may be complemented by ISO guidelines, principles and terminology (AS/NZS ISO 31000:2009) and include formal methods for:

- Risk identification
- Risk analysis
- Prioritising risk
- Risk treatment
- Monitoring and review processes

5.3.3. Success of QA and risk management programs

The uptake and maintenance of QA and risk management programs appears to rely on a number fundamental critical success factors:

- Commitment from the program owner to drive the program
- The commitment of management and staff within the unit
- An appropriate level of complexity for the business to manage
- The delivery of tangible and/or intangible benefit to the business
- Use of appropriately accredited and consistent third-party verification methods to ensure integrity
- Use of appropriate and consistent first-party verification methods
- A method for measuring overall performance of the program and all parties involved in the program
- Adequate training for all parties involved in the program

The adoption of QA programs is also contingent upon the development and use of appropriate and well defined standards, rules and usable reference materials for all parties involved. Typical aspects of QA programs include:

- A set of standards, generally written to an international standard for the subject, that outline the desired outcome of the standard (generally separate outcomes are treated as "elements") and the methods or practices required to achieve the outcome.
- A set of rules which determine who is involved in the program (all parties), how they are involved and their requirements and responsibilities, the mechanism for assessment and verification, definitions of non-conformances and sanctions, fees and other administrative considerations, as well as usage guidelines for any logos, marks or devices associated with involvement in the program.

- An instructive manual or guide that provides detailed information for participants in regards to conforming to standards, including checklists and necessary record keeping practices and templates.
- An application form (hard or soft copy) and information about the application process and progression into the program.
- Material to assist with auditing such as audit checklists, report templates and rules governing certifiers and auditors activities.
- A register of individuals or organisations in the program and a register of certification bodies and, in some cases, auditors.
- Relevant management items for the organisation that owns the program including codes of conduct, board and/or committee charters, standards development processes, corporate governance, grievance procedures etc.
- A central repository of information for all stakeholders (participants, auditors, certifiers, consumers, media etc).
- A schedule of fees.

Drivers for participation are critical to the success of QA and risk management programs. The drivers for participation in the programs that were reviewed through the research can be classified as follows:

- **Consumer driven**
Where consumers are seeking assurances regarding the nature, provenance, sourcing, production, handling etc of the item in question. Consumer driven programs can also be regulatory driven.
- **Regulatory driven**
Where participation in a program is required through regulations and legislation.
- **Industry driven**
Where participation in the program is a prerequisite for membership of an industry body which in turn is a prerequisite for commercial operation. Industry driven programs can also be regulatory driven.
- **Price driven**
Where the buyer is willing to offer a price premium for items that conform to the program requirements. This is often the case for consumer driven programs.
- **Aspirationally driven**
Where the program appeals to individuals or companies that aspire to best practice, the attainment of formal recognition and continual improvement. This often exists in combination with industry driven programs.

- **Process improvement driven**

Where participation in a QA or risk management program enables the improvement of processes and therefore the gaining of efficiencies within an organisation's operations. This often exists in tandem with industry driven programs.

- **Safety driven**

Where the program provides assurances that an item has been produced, sourced, handled etc in a way that is considered to be safe, typically for human use or consumption. This often exists in combination with consumer, industry and regulatory driven programs.

QA and risk management programs generally have some form of recognition through the use of a mark, device, appellation or logo to differentiate program participants.

The use of such marks, devices, appellations or logos is usually governed by a set of rules and can only be used by those who meet the requirements of the program standards and operate within the rules. Use of the marks, devices, appellations or logos is also often linked to a form of licensing agreement.

Examples of program marks and devices are outlined below:



5.3.4. Management structure

The management structure of a QA program generally includes:

- **An owner**

The entity that owns the standards and rules. In most cases, this role is fulfilled by an advisory committee, a board, the certifier and a legal entity (either a company or industry organisation).

- **A technical or advisory committee**

Responsible for providing technical advice relating to the program's standards and requirements. Makes recommendations and determinations and submits these to the program "owner".

- **A certifier**

Three options exist for appointment of a certifier:

1. The use of an existing, external certifying body or bodies.
2. The creation of a certifying body (generally a wholly owned subsidiary created entirely for the purpose of certifying against the program's standards).
3. The owner becomes a certifier.

In all cases, the certifier holds an appropriate level of accreditation and is the entity that bestows certification.

- **Auditors**

Those responsible for auditing the program. These may belong to the external certifying body/ies or to a specially formed subsidiary, generally under contract. The auditors do not make certification decisions; this is the role of the certifier. The auditor's report may or may not include a recommendation regarding certification.

5.3.5. Recognition at unit or supply chain level

The research revealed that QA programs that assure components of a supply chain typically require individual facilities or "units" within the supply chain to be recognised. Of the programs that were reviewed, those that followed a product from start to finish and/or where product changed hands, without exception, required individual units to be recognised.

Further reinforcing the unit based approach is the report *Gap Analysis in relation to Quality Management for the Supply chain Management of Genetically Modified (GM) products* commissioned by DAFF states:

"In order for identity preservation and segregation assurances to be made and verified, a thorough understanding of the process and customer requirement at all stages of the supply chain is necessary. It is also critical that there is real commitment by all players in the chain to adhere to system, customer, market and legislative requirements."

5.3.6. Method of recognition

The terms accreditation, certification and registration are often used interchangeably to describe the method and outcome of participation in a QA program. There are, however, distinct differences between each approach. The ISO Council Committee on Conformity Assessment (CASCO) provides the following definitions:

- **Accreditation**
Procedure by which an authoritative body gives formal recognition that a **body or person** is competent to carry out specific tasks.
- **Certification**
Procedure by which a third-party gives written assurance (certificate of conformity) that a **product, process or service** conforms to specified requirements.
- **Registration**
Procedure by which a body indicates relevant characteristics of a product, process or service, or particulars of a body or person, in an appropriate publicly available list.

There is little difference in the composition and implementation of registration and certification programs with the only fundamental difference being that a certification program requires the appointment of a certification body/ies and the issuing of certificates. Certification does, however, bestow enhanced recognition upon the participant in comparison to registration due to third-party assurance.

Accreditation programs are more onerous in administration, implementation and participation than certification and registration programs.

The majority of programs reviewed were certification programs.

5.3.7. Verification methods

In general, there are three levels of assurance that can be provided through certification or verification: first, second and third-party certification (or verification):

- **First-party**
The individual or organisation providing the goods or services offers assurance that it meets certain claims. Also referred to as self-attestation.
- **Second-party**
An association to which the individual or organisation belongs provides the assurance.
- **Third-party**
An independent assessment verifies that specified requirements pertaining to a product, person, process or management system have been met. This level of verification is considered to carry the highest level of integrity.

Each of these approaches reflects the level of connectivity and degree of trust between those within the supply chain and parties external to the supply chain such as government or animal activists.

In general, the more direct the linkage and the higher the trust, the lower the level of verification required. The lower the trust and more indirect the linkage, the higher the level required.

Where activities are carried out through long or complex supply chains and/or are global in nature (indirect) and highly controversial (very little trust), assurance programs tend to utilise third-party evaluation systems.

Many of the programs reviewed utilised a combination of first-party and third-party verification methods while others relied on third-party only, for example:

- **First-part and third-party in combination**
 - Biological Farmers of Australia Australian Certified Organic
 - GlobalGAP
 - Certified Land Management System
 - Marine Stewardship Council Chain of Custody
- **Third-party only**
 - Forest Stewardship Council: Australia Forestry Standard
 - Forest Stewardship Council: Chain of Custody Standard
 - Red Tractor Assurance for Farms Scheme

5.4. Method and frequency of assessment

The ways in which verification is undertaken generally falls into two categories:

- **Remote**

In which the auditor is provided with evidence of conformity via remote means such as uploading to the internet or sending via email, fax or post. This may also include the use of telephone or web-enabled interviews and the use of video for remote inspection purposes. This method is often referred to as desktop, remote or computer-aided/enabled or assisted.
- **On-site**

In which the auditor visits the unit's physical site and conducts an inspection of the documents, records, facilities and operations. This may also include interviews.

The majority of QA and risk management programs reviewed utilised a combination of these methods. This typically involved evidence being submitted remotely (likely in order to reduce the duration and thereby cost of on-site activities and to enable more frequent verification), complemented by onsite verification to confirm the outcomes of remote methods and identify non-conformance while the facility is in active operation.

The frequency of verification (often referred to as "surveillance frequency") can be determined either based on a fixed schedule (usually coinciding with renewal of certification) or on risk, in which case auditors undertake risk assessments during remote or on-site verification and make recommendations for the scheduling of the next assessment. This is the primary association between risk assessment and QA.

QA programs that utilised risk assessment to determine surveillance frequency and method tended to be those that were "whole of chain" programs or more complex in terms of what was being certified.

5.5. Location of certifier

The certifiers associated with the programs reviewed in the research were typically domestic-based or market-centric:

- **Domestic-based certifier**

Certifier is based in the country of origin of the program standards or the program owner. The domestic-based certifier utilises domestic auditors or overseas auditors. Certification issued by domestic-based certifier.

- **Market-centric certifier**

The program owner appoints a local (in-market) certifier to certify units in their own country. The certifier in turn appoints qualified auditors. Audits and certification are undertaken according to the program standard.

Those programs that were reviewed that crossed international boundaries all utilised market-centric certifiers. No program that had application in multiple countries was found to have a domestic-based certifier.

In seeking to establish the basis for the majority of international QA programs adopting the market-centric mode of operation, it was discovered that the *ISO/IEC 17021:2011 Conformity assessment - Requirements for bodies providing audit and certification of management systems* indicated a requirement for the certification body to ensure *"it has adequate arrangements to cover liabilities arising from its operations in each of its fields of activities and the geographic areas in which it operates"*.

It should also be noted that an excerpt from the Farmer Review states that *"In all countries visited by the Review, governments supported the application of OIE standards. There was sensitivity in some countries about any suggestion that Australia might be seeking to mandate its own standards overseas"*.

5.6. The use of tiers within programs

A number of the programs employed a tiered structure which typically occurred where:

- A variety of products was being produced.
- Various operations existed (multi or single sites).
- A unit undertook different activities to other units within the program.
- There were levels of progression offered through the program.

It is hypothesised that a tiered structure, while more complex in nature, encourages continual improvement and presents an aspirational pathway.

5.7. Allowance for parallel operations

In the context of QA and risk management programs, the term "parallel operations" relates to concurrent or simultaneous operations that occur within or by a certified unit where one operation is run under or producing certified items and one is not.

An example of a parallel operation as it relates to ESCAS would be where ESCAS and non-ESCAS cattle are being processed in the one facility.

Parallel operations were dealt with in one of two ways in those programs that were reviewed:

- Parallel operations are not allowed (closed program).
- Parallel operations are allowed; however, more stringent standards, rules, controls and surveillance frequencies were imposed.

5.8. Conclusions

Based on the research, a number of conclusions have been drawn:

- Typical structures exist for the management of programs in which there is at a minimum an owner, an advisory committee, a certifier and auditors.
- QA programs are generally certification programs with certifiers operating in the country in which the party to be certified operates. This is likely due to litigious and/or insurance reasons and in response to concerns relating to sovereign rights.
- Internationally recognised guidelines, principles and terminology exist for QA and risk management programs.
- QA programs that assure components of a supply chain or provide an unbroken record of possession and treatment of a product throughout a supply chain (ie "chain of custody"), typically require individual facilities or "units" to be recognised.
- Methods for assessing conformance with a QA and risk management program typically involve a combination of first-party assessment with third-party verification.
- Methods for undertaking assessments are typically combined and include remote and on-site auditing.
- Surveillance frequency based on risk assessment allows for greater program flexibility.

In addition, effective QA programs:

- Include a method to promote continual improvement.
- Are scalable to enable additional requirements to be adopted.
- Are adaptable such that changes to the program standards may be accommodated.
- Are aspirational - aspiring to best practice.
- May be customised when applied internationally to accommodate cultural, economic, political, legal and technological sensitivities.
- Are flexible in design to allow parallel operations under certain conditions.

The existence of clearly defined drivers was found to be important in determining the success of QA programs. This typically involved one or more of the following:

- **Consumer driven**
Where consumers are seeking assurances regarding the nature, provenance, sourcing, production, handling etc of the item in question. Consumer driven programs can also be regulatory driven.
- **Regulatory driven**
Where participation in a program is required through regulations and legislation.
- **Industry driven**
Where participation in the program is a prerequisite for membership of an industry body which in turn is a prerequisite for commercial operation. Industry driven programs can also be regulatory driven.
- **Price driven**
Where the buyer is willing to offer a price premium for items that conform to the program requirements. This is often the case for consumer driven programs.
- **Aspirationally driven**
Where the program appeals to individuals or companies that aspire to best practice, the attainment of formal recognition and a focus on continual improvement. This often exists in combination with industry driven programs.
- **Process improvement driven**
Where participation in a QA or risk management program enables the improvement of processes and therefore the gaining of efficiencies within an organisations operations. This often exists in tandem with industry driven programs.
- **Safety driven**
Where the program provides assurances that an item has been produced, sourced, handled etc in a way that is considered to be safe, typically for human use or consumption. This often exists in combination with consumer, industry and regulatory driven programs.

6. Consideration of various approaches to QA

The advantages and disadvantages of a number of approaches to QA, based on the research undertaken through this project, have been considered and are reported according to the following categories:

- Management structure
- Program and administrative structure
 - Recognition at unit or supply chain level
 - Method of recognition
 - Assessment and verification methods and frequency
 - Location of certifier
 - Use of tiers within the program
 - Formalised standards and procedures
- Consideration of an aspirational pathway

As stated in Section 2.3, this research required the consultants to investigate the development of a risk management and QA program for the live export industry. The research demonstrated that the most effective application of risk management was as an element of a broader QA program and, as such, reference to QA throughout this report as it applies to the live export industry should be interpreted as risk management and QA unless otherwise stated.

Consideration of complementary systems

As part of the project, existing QA related to the livestock production sector were considered in terms of whether they could be leveraged in the development of a QA program for the livestock export industry to complement ESCAS.

While elements of these programs have influenced the recommendations made through this report and these programs would be relevant in the extension of an in-market program back through the domestic supply chain, these programs were found to address distinctly different issues or supply chain elements and are therefore not directly relevant to this project which addresses the need for QA post-disembarkation.

The programs reviewed and their relevance were:

- LPA - On-farm, focused on hygiene, not relevant.
- LPA QA/CATTLECARE - On-farm, not relevant.
- LEAP - Export focused to point of disembarkation, superseded by ASEL, possible application in a whole-of-chain approach.
- ASEL - Export focused up to point of disembarkation, can be used as a basis for in-market standards (along with ESCAS). Applicable in a whole-of-chain approach.

6.1. Management structure

A number of structural features were found to be common among the QA programs reviewed through this project including the existence of a: program owner, standards advisory and integrity committee, certification body committee and certification body/ies with auditors. Consideration was given to the application of such roles in a QA program (the Program) for the live export industry and, based on the research, two possible alternatives for the adoption and implementation of these roles is provided in Table 6. Option 1 and option 2 are not mutually exclusive and a combination of the options may be adopted.

Table 6: Options for the appointment of roles fundamental to the Program

Role and responsibility	Option 1	Option 2
<p>Owner</p> <p>The organisation representing the Program and who retains ownership of the standards, rules and logos/marks.</p>	<p>Create a new, wholly owned company</p> <p>The owner is a new, wholly owned company.</p> <p>Funding for this company may initially be delivered through levies; assuming a cost recovery function once the Program is operational.</p> <p>In this case, the wholly owned company would require a board and administrative support.</p> <p>Pros</p> <ul style="list-style-type: none"> • This would serve to keep the Program separate from industry organisations. <p>Cons</p> <ul style="list-style-type: none"> • May take slightly longer to establish appropriate legal structures and therefore delay the Program. • Additional costs and logistical issues. 	<p>Append to existing industry organisation</p> <p>An alternative is to position the Program within an existing industry organisation.</p> <p>Pros</p> <ul style="list-style-type: none"> • This would enable the Program to be established more quickly. • Reduced cost due to opportunity to leverage resources. <p>Cons</p> <ul style="list-style-type: none"> • May compromise the independence of the Program.

Role and responsibility	Option 1	Option 2
<p>Standards Advisory and Integrity Committee</p> <p>Responsible for developing and defining the Program Standards and Rules, reviewing and updating the Standards and Rules, reviewing conformance reports and technical advice. Responsible for monitoring non-conformances and sanctions.</p>	<p>New committee established</p> <p>A new committee may be established. The committee may include representatives from relevant industry organisations as well as technical advisors.</p> <p>Pros</p> <ul style="list-style-type: none"> • Particularly appropriate when a wholly owned company is the program owner. • Serves to keep the Program at arm's length to any current committees. • Allows the committee to dedicate attention. <p>Cons</p> <ul style="list-style-type: none"> • May take slightly longer to establish appropriate legal structures and therefore delay the Program. • Cost of establishment and operation. 	<p>Existing committee assumes responsibility</p> <p>The responsibilities of such a committee may be assumed by an existing industry committee (in addition to their existing duties).</p> <p>Pros</p> <ul style="list-style-type: none"> • Ability to utilise existing structures. <p>Cons</p> <ul style="list-style-type: none"> • Existing committee's responsibilities compete for attention with new Program responsibilities.
<p>Committee for monitoring certification body/ies</p> <p>In the case where multiple certification bodies exist, a formal mechanism should be established to ensure that feedback from certifying bodies is captured and their performance monitored.</p>	<p>Certification Body Committee</p> <p>This committee would be responsible for monitoring certifier conformance and consistency.</p> <p>Pros</p> <ul style="list-style-type: none"> • Facilitates a formal method for monitoring, reviewing and ensuring certification body performance including consistency in auditing. • Able to assist in localisation of standards where required (ie adaptation to market). <p>Cons</p> <ul style="list-style-type: none"> • May take longer to establish appropriate structures and therefore delay the program. • Adds a layer of complexity and therefore cost. 	<p>No Certification Body Committee</p> <p>The Standards Advisory and Integrity Committee (see above) assumes responsibility for monitoring certifier conformance and consistency.</p> <p>Pros</p> <ul style="list-style-type: none"> • Less complexity and less costly. <p>Cons</p> <ul style="list-style-type: none"> • Increased burden of responsibility for the Standards Advisory and Integrity Committee. • Possible requirement for different skills to those represented on the Standards and Advisory Committee.

Role and responsibility	Option 1	Option 2
<p>Service Provider</p> <p>The Service Provider is responsible for the overall running of the Program. This includes administrative and communication responsibilities for the Program, the Board (where applicable) and the committees.</p>	<p>External Service Provider</p> <p>Administrative services are outsourced by the owner. A cost recovery mechanism may be established once the Program is operational.</p> <p>Pros</p> <ul style="list-style-type: none"> • Independent. <p>Cons</p> <ul style="list-style-type: none"> • Direct expense. 	<p>Internal Service Provider</p> <p>The responsibility for the overall running of the program is assumed by an existing industry service provider.</p> <p>Pros</p> <ul style="list-style-type: none"> • Opportunity to leverage existing resources. <p>Cons</p> <ul style="list-style-type: none"> • Independence of program may be compromised.
<p>Certification body/ies and auditors</p> <p>The organisation/s that provide the auditing services and issue certificates of conformance. The certifying unit is separate to the auditing team.</p> <p>Separate rules and standards for certifying bodies must be developed. Application to become an approved Program certifier must be made formally with the Program owner.</p>	<p>Multiple Certification Bodies</p> <p>Certification services for the Program may be open to multiple certification bodies.</p> <p>Each certification body would have a team of auditors assigned to the program.</p> <p>Pros</p> <ul style="list-style-type: none"> • Useful when certifiers are based in the unit's country of operation. • Can encourage more competitive pricing of audits and services by the various certification bodies. <p>Cons</p> <ul style="list-style-type: none"> • Adds complexity and cost to a program as more parties to monitor. • Possibility of inconsistent application of standards and assessment methods. 	<p>Single Certification Body</p> <p>A single certification body would be appointed either by:</p> <ul style="list-style-type: none"> • Outsourcing this function to an existing certification body that meets a pre-determined criteria. • Establishing a specific certification body for the Program. <p>The certification body would assign a team of auditors to the program.</p> <p>Pros</p> <ul style="list-style-type: none"> • Lack of competition may result in high audit costs. • Increased ability to ensure consistent application of standards and assessment methods. <p>Cons</p> <ul style="list-style-type: none"> • Location of certification body may become an issue of sovereignty. • Lack of understanding of various markets. Legal, political and cultural sensitivities. • Will require significant resources from the one organisation.

6.2. Program structure

The secondary research identified a number of alternative structures which may be applied to a QA program. These are discussed below.

6.2.1. Recognition at unit or supply chain level

Within a QA program, recognition can occur at a unit or supply chain level but typically occurs as the unit level. The advantages and disadvantages of each are presented in Table 7.

Table 7: Unit-based vs supply chain-based recognition

Unit-based - pros	Unit-based - cons
<ul style="list-style-type: none"> • Ability for exporters (and importers) to easily build their supply chains and bring in units based on that particular unit's certification status. • Provides aspirational pathway for units - encourages self improvement. • Consistent with other programs operating across international borders and across supply chains. • Increased numbers in the program (approximately 260 units in Indonesia alone vs about 12 supply chains in total). • Would encourage in-market ownership and support of the program. • Would allow other drivers for participation in the program to be introduced on a market by market basis. • Greater potential uptake and broader appeal. 	<ul style="list-style-type: none"> • Units may not have capability, resources to achieve certification. • Reduced Australian influence. • Lack of immediate motivation or drivers for unit participation.
Supply Chain-based - pros	Supply Chain-based - cons
<ul style="list-style-type: none"> • Exporters can drive participation. • Greater ability to control compliance and enforce standard. • Potentially easier to administer. 	<ul style="list-style-type: none"> • Reduced scope to meet specific market drivers. • Exporter has no jurisdiction in foreign countries and units. • Further aggravate grievance regarding Australian interference in foreign markets.

6.2.2. Method of recognition

A QA program may be an accreditation, certification or registration program, although these terms are often incorrectly used interchangeably.

Accreditation programs are more onerous in administration, implementation and participation than certification and registration programs. The advantages and disadvantages of certification and registration are outlined in Table 8.

Table 8: Certification vs registration

Certification - pros	Certification - cons
<ul style="list-style-type: none"> • Perceived to have a higher level of integrity. • Potential for a certification program to be more likely recognised by government than a registration program. • Able to be certified by international certifying bodies. • Internationally recognised standards and requirements exist for certification programs. • Certification is generally associated with QA programs. 	<ul style="list-style-type: none"> • Implementation timeframe longer. • More complex than registration - greater requirement for verification, evidence etc. • International standards and requirements must be adhered to.
Registration - pros	Registration - cons
<ul style="list-style-type: none"> • Implementation timeframe marginally shorter than that for certification (no appointment of certifiers but still the appointment of auditors, so negligible). • No need for certifying body/ies. 	<ul style="list-style-type: none"> • Perceived to have less integrity than certified programs. • Typically industry owned and subject to mistrust.

6.2.3. Assessment and verification methods and frequency

All QA and risk management programs require an assessment of conformance to standards and requirements at a predetermined interval in a particular manner. Based on the secondary research, the majority of QA programs utilised a combination of:

- Remote and on-site assessment
- First and third-party verification
- A surveillance frequency that was either fixed or based on risk

The project team considered these approaches in the formulation of recommendations and the various factors considered are outlined in Table 9.

Table 9: Consideration of options for assessment, verification and frequency

Option	Considerations
<ul style="list-style-type: none"> • Remote assessment only 	<ul style="list-style-type: none"> • Lacks credibility - generally supplements or supports on-site methods. • Typically only demonstrates what people are doing in accordance with requirements, not in breach of requirements.
<ul style="list-style-type: none"> • On-site assessment only 	<ul style="list-style-type: none"> • Frequent on-site inspections are required to identify breaches - resource and cost intensive. • Typically only demonstrates what people are doing in accordance with requirements, not in breach of requirements.
<ul style="list-style-type: none"> • Combination of remote and on-site assessment 	<ul style="list-style-type: none"> • Reduces time spent on-site and therefore costs. • Enables frequent remote assessments to be verified through on-site inspections leading to greater credibility and integrity.
<ul style="list-style-type: none"> • First-party verification only 	<ul style="list-style-type: none"> • Lacks credibility ("I say this is what I do"). • Can be undertaken more frequently.
<ul style="list-style-type: none"> • Third-party verification only 	<ul style="list-style-type: none"> • Resource and cost intensive. • Greater credibility and integrity ("They say this is what I do").
<ul style="list-style-type: none"> • Combination first and third-party 	<ul style="list-style-type: none"> • Provides a method to verify what the first-party process reveals, thereby providing feedback and continual improvement. • Is a credible method ("I say this is what I do and they agree").
<ul style="list-style-type: none"> • Fixed surveillance frequency 	<ul style="list-style-type: none"> • Inflexible structure, does not allow for recognition of risk and good practices the unit may be using to manage risk. • Easy to manage and schedule audits around.
<ul style="list-style-type: none"> • Surveillance frequency based on risk. 	<ul style="list-style-type: none"> • Fosters continual improvement and attainment of "low risk" rating. • Recognises good practices the unit may be using to manage risk. • More difficult to manage and schedule audits around.

6.2.4. Location of certifier

The QA programs reviewed used domestically-based or market-centric certifiers. The project team considered these two alternative options in the context of formulating recommendations for the development of a QA program for the livestock export industry.

The advantages and disadvantages of each option are outlined in Table 10.

Table 10: Pros and cons of domestic (Australian)-based certifier vs in-market certifier

Australian-based - pros	Australian-based - cons
<ul style="list-style-type: none"> • More control over the implementation of the Standards, auditing etc. • Easier to administer. 	<ul style="list-style-type: none"> • Certifiers and auditors potentially naive to in-market issues and idiosyncrasies. • High cost of travel to markets for audits. • In consideration of ESCAS, potential issues relating to integration with ESCAS audits. • Sovereignty issues if certifier is based in Australia. • May serve to compound in-market tension regarding perceived Australian Government interference in live export trade. • Potential issues with the scheduling of audits and number of auditors required to meet demand.
In-market - pros	In-market - cons
<ul style="list-style-type: none"> • Sovereignty issue likely to be mitigated if certifier is local to market. • Issue of consistency can be managed within the structure of the program and underpinned by the standards. • Capable certifying bodies are available within or in close proximity to Australia's major markets. • Reduced travel costs. • Understanding of local issues and cultural sensitivities. 	<ul style="list-style-type: none"> • Market-based certifier may result in a less consistent approach to auditing and certification than centralised certifier.

6.2.5. Use of tiers within the program

Discussions with MLA and LiveCorp indicated a need for the recommendations for the development of a QA and risk management program to incorporate an inclusive, aspirational pathway to encourage continual improvement and participation in the program.

To achieve this, the Program must be incentivised either through the opportunity to progress through a tiered structure or realise administrative concessions through a flat structure.

Table 11 outlines the advantages and disadvantages of a tiered or flat structure for the Program.

Table 11: Pros and cons of tiered vs flat structures

Tiered structure - pros	Tiered structure - cons
<ul style="list-style-type: none"> • Enables progression through the levels, thereby fostering continual improvement. • Provides an aspirational pathway. • Will cater to an operator's individual situation and ability (inclusive rather than exclusive). • Possibly higher chance of increased participation as it will have broader application. 	<ul style="list-style-type: none"> • In the case of ESCAS, possibility that operators in the highest level become key targets of activist and nuisance groups in attempts to discredit the Program and ESCAS. • Implementation effort and timeframe possibly greater/longer.
Flat structure - pros	Flat structure - cons
<ul style="list-style-type: none"> • Reduced implementation effort and timeframe. • Possible option to move to tiered structure later. • Reduction of risk rating (and therefore surveillance frequency) fosters continual improvement. 	<ul style="list-style-type: none"> • Opportunity for continual improvement less defined. • Requires balance to ensure uptake amongst all types of operators - potential to be seen as accommodating the lowest common denominator or being exclusive if too onerous.

6.2.5.1. Options for tiered and flat structure

In considering the applicability of a tiered or flat structure for a QA program, the project team developed two alternative structures for consideration. These are provided in Table 12.

Table 12: Structure for a tiered or flat structure within the Program

	Tiered structure	Flat structure
Introductory or Conversion Step	<p>All units within the program must enter the program at this stage.</p> <p>The introductory level requires an initial self-assessment, verified by a desktop audit and, finally, an on-site audit before entrance into the program is granted.</p> <p>The surveillance frequency may be based on a risk assessment undertaken during the initial desktop and on-site audit.</p> <p>Units cannot stay at the introductory level; rather this would be a conversion level only.</p>	<p>All units within the program must enter the program at this stage.</p> <p>The conversion level requires an initial self-assessment, verified by a desktop audit and then an on-site audit before entrance into the program is granted.</p> <p>A recommendation is made for the initial surveillance frequency based on a risk assessment undertaken during the initial desktop and on-site audit.</p> <p>Units cannot stay at the conversion level, it is a "step" into the program.</p>
Level 1	<p>Level 1 is the first tier of the program that may be achieved.</p> <p>Ongoing surveillance involves self-assessment along with desktop auditing and on-site auditing undertaken by external, third-parties against all requirements in the Program Standard.</p> <p>Ongoing surveillance frequency for self-assessment/reporting and desktop audits are based on a risk assessment.</p> <p><i>If the ongoing on-site audit is recognised by DAFF as one ESCAS audit, then Level 1 would not require additional on-site auditing to that which is required under ESCAS.</i></p>	<p>The flat structure would require self-assessment, desktop auditing and on-site auditing undertaken by external, third-parties against all requirements in the Program Standard.</p> <p>Ongoing surveillance frequency for self-assessment/reporting and desktop audits are based on a risk assessment.</p> <p><i>If the ongoing on-site audit is recognised by DAFF as one ESCAS audit, then this would not require additional on-site auditing to that which is required under ESCAS.</i></p>
Level 2	<p>Available to consistently low risk units. As per level 1 plus:</p> <p><i>If the risk assessment framework in the Program is recognised by DAFF then potential for an additional audit to be removed in recognition of the reduced risk the unit poses.</i></p>	NA

6.2.6. Formalised standards and procedures

All QA and risk management programs require formal standards and generally rules. AS/NZS ISO 9001:2008 Quality management systems - requirements and AS/NZS ISO 31000:2009 Risk management - Principles and guidelines are generally used to form the basis of such programs. Additional standards are generally included based on the objectives and focus of the program.

In formulating recommendations for formalised standards and procedures for a QA program, the project team considered the following options which are further considered in Table 13:

1. That the program use ESCAS requirements as the standards with no further requirements.
2. That ESCAS form the entry level into a program and the remaining levels aspire to higher practices than those required to comply with ESCAS.
3. That the ESCAS requirements become normative elements under the Program and other QA and risk management elements are also introduced.

Table 13: Considerations for ESCAS integration into the Program standards

Option	Considerations
ESCAS is the Standard	<ul style="list-style-type: none"> • ESCAS not a QA/risk program, it is a regulatory compliance system. • ESCAS is Government driven and therefore cannot be applied in other countries easily. • Difficult to introduce elements over and above ESCAS. • Assessment and compliance framework inflexible.
ESCAS as entry level or pre-requisite into Program	<ul style="list-style-type: none"> • Devalues ESCAS as it is positioned as "low level". • ESCAS is Government driven which limits application as a broader program in other countries. • ESCAS assessment and compliance framework inflexible. • Enables the addition of QA and risk management elements (through progression up a level). • Difficult to introduce requirements that are in addition to ESCAS and foster attainment of best practice. • ESCAS requirements could be elevated to meet Program requirements.
ESCAS becomes normative standards in broader program	<ul style="list-style-type: none"> • Removes issues around Government ownership; becomes an industry program. • Standardisation provides more clarity around requirements. • Enables the addition of additional elements. • Enables introduction of requirements that foster attainment of best practice, rather than bare minimum. • Enables the introduction of risk based assessment, self-reporting and fosters continual improvement. • Perceived added requirements in market.

6.3. Consideration of an aspirational pathway

A specific requirement of the project objectives was to develop a program that provided an aspirational pathway.

While both the tiered approach and a flat structure supported by a surveillance frequency based on risk assessment provide this for program participants, consideration was also given to an aspirational pathway for the program itself, rather than participants, whereby it may evolve overtime. This is presented in Table 14 (timeframes are indicative only).

Table 14: Pathway for Program evolution

Timeframe	Progression
Immediate (Now)	<ul style="list-style-type: none"> Gathering all existing MLA/LiveCorp resources and templates into a centralised access system (ExtraNet). Review and standardisation of all resources. Development of a Program "manual" incorporating all existing relevant resources as well as guidelines and policies for quality controls and Program documentation. Development of training to integrate Program requirements, such as risk assessment, quality management and record keeping, with existing ESCAS requirements and training. Targeted extension of the Program manual, resources and templates into supply chains and units
Short-term (<18 months)	<ul style="list-style-type: none"> Uncertified assurance program Development of Standards and Rules Flat structure
Mid-term (2-5 years)	<ul style="list-style-type: none"> Certification program Flat structure Seek DAFF concessions
Long-term (5 years+)	<ul style="list-style-type: none"> Certified program Tiered Applied through chain (Australia to export market slaughter).

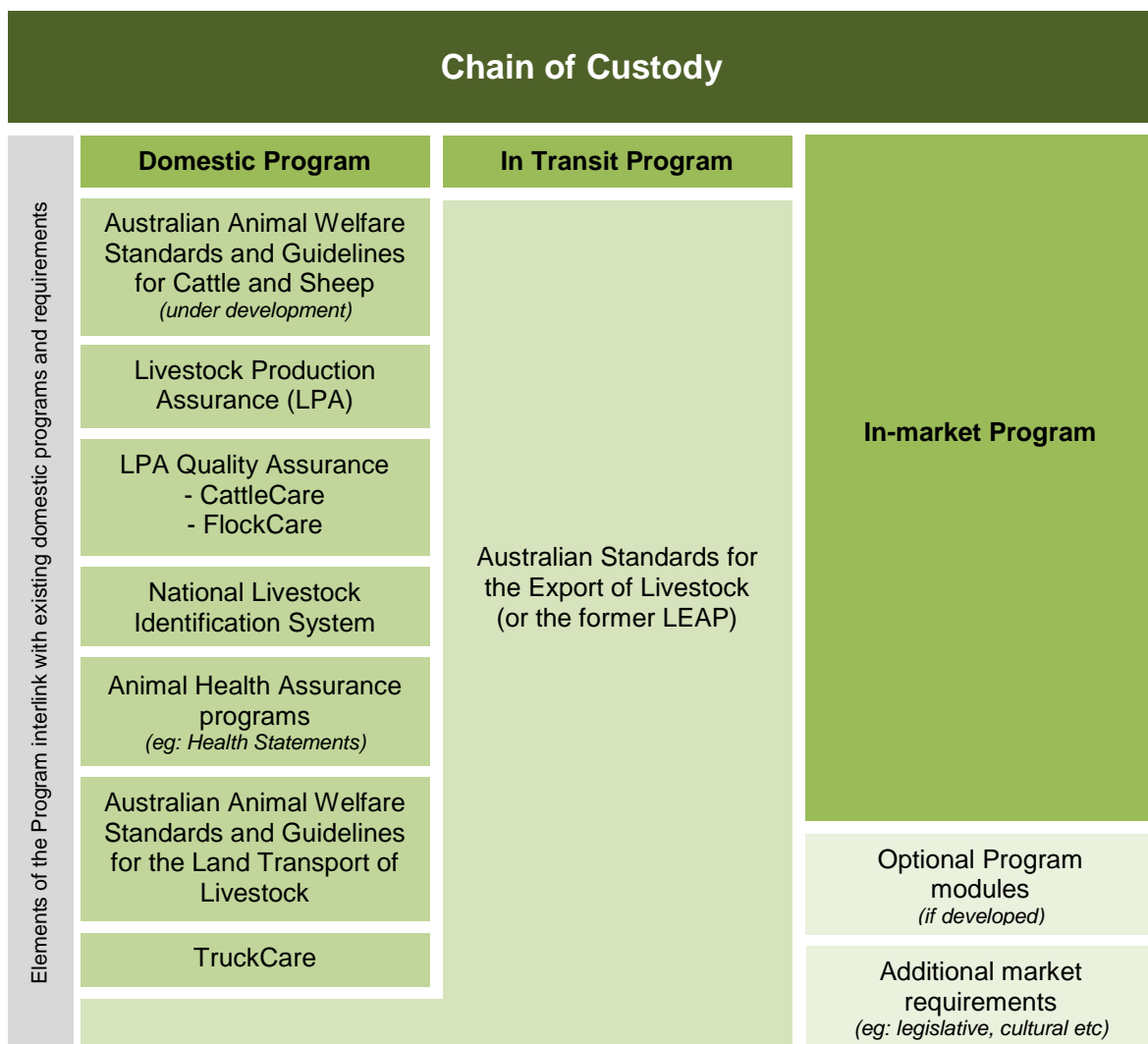
6.4. Consideration of through-chain application

In the course of considering approaches for the Program, the project team was required to consider how a QA program, established from point of disembarkation, may be extended back through the Australian-based supply chain.

Many domestic and in-transit programs and requirements already exist or, in the case of LEAP, formerly existed that may become requirements of an overarching export market whole of chain (or chain of custody) program.

Figure 3 outlines the structure and interactions between existing programs and requirements and a new whole of chain program.

Figure 3: A Chain of custody program from Australia to slaughter in-market



7. Summary and conclusions drawn from overall findings

The following section responds to each of the project requirements based on the findings of the research:

A program is required to meet the expectations of the Australian Government in terms of risk based assessments and associated auditing regimes.

Critical to the success of any program stemming from this research will be acceptance by the Australian Government and the granting by the Government of concessions for those involved in the program. This may extend to reduced ESCAS audits, recognition of Program audits within ESCAS and moderated treatment of non-compliances based on Program participation. Without such incentives, the prospect of the Program being adopted is greatly reduced.

A QA program, underpinned by independent third-party certification, is likely to be more credible as viewed by the Australian Government, than an uncertified program.

Certification systems in general carry greater integrity and more developed methods for minimising or mitigating risk than uncertified systems. Furthermore, certification would differentiate the Program from ESCAS in that ESCAS is not certified. The introduction of such a program will, however, be problematic given existing market tension regarding perceived Australian Government interference in trade and the already significant cost of doing business associated with meeting ESCAS requirements. There is a risk that this program will be considered an extension of these perceived impositions.

The Australian Government also requires assurance that the industry is able to manage the period between ESCAS audits (the "inter-ESCAS audit gap") effectively and provide assurances that non-compliances during this period are anomalies and exception rather than the rule.

Self-reporting will be crucial to addressing the inter-ESCAS audit gap; however, exporters have expressed concern regarding self-reporting due to rumours regarding the treatment of supply chains which have previously self reported. That is, self-reporting has resulted in similar sanctions to those which would otherwise be applied if the non-compliance was discovered by a third-party (animal activist).

Confidence in self-reporting would be developed through the Program in that reporting would be to industry and confined to the Program rather than to Government. There would be no obligation under the industry-led program to report to Government. This may also serve to develop confidence in self-reporting under ESCAS.

In addition, the third-party verification of self reported outcomes, internal practices and general conformance to the requirements of a QA program will provide further assurance to Government of the effective control and management of operations during the inter-ESCAS audit gap period.

A major component of any QA program is the ongoing recording of conformance to program requirements. An individual unit's record keeping together with third-party record keeping and overall program record keeping through a centralised database will allow for greater transparency and a history of performance in all units in the live export supply chain and the early detection of potential risks or incursions.

This performance history will allow supply chains to demonstrate routine performance and conformance with the Program. This will by default allow routine compliance with ESCAS on an ongoing basis to be demonstrated and will assist in establishing a case that instances of non-compliance are anomalies rather than evidence of systemic failure.

Has a set of consistent procedures through the supply chain and across the industry

The *DAFF Guidance on meeting OIE animal welfare outcomes* provides a set of consistent procedures which support compliance with ESCAS. A risk assessment and QA program that is to add value to the live export industry and provide assurance of ongoing compliance during the inter-ESCAS audit period should build upon and augment these procedures. This would be achieved by identifying gaps in the current procedures and standardising the use of resources developed to support compliance, such as SOPs, training packages and risk assessments.

These augmented procedures should form the basis of standards and rules which bind the ESCAS requirements to relevant resources throughout supply chains and across the industry. Auditing against such standards would allow initiatives introduced to mitigate risk and manage the inter-ESCAS audit gap to be acknowledged and certified.

The introduction of clear, certifiable standards and rules governing certifier and auditor activities and performance will also allow the issue of auditor capability to be addressed. The Program's standard would require that the auditor be able to demonstrate a minimum level of understanding of the subject or that the audit team have an appropriate resource on hand, with the required industry knowledge and experience, before they were able to audit against the standards. This would provide for more consistent audit performance and encourage the provision of meaningful feedback to program participants.

Has a set of tools for risk assessment and mitigation

Risk management involves a universally accepted approach which may be complemented by ISO guidelines, principles and terminology. (AS/NZS ISO 31000:2009).

As outlined previously, a critical concern for the Government is what occurs during the inter-ESCAS audit gap. While risk assessment in isolation will not fully address this gap, this may be addressed through a QA program, complemented by a risk assessment component. As such, within the context of a QA program for this industry, there are two applications for risk management:

- 1) For a unit to use internally to assess risk and develop contingency plans; and
- 2) For the program owners to use to determine surveillance frequency of the unit.

Is based on a self- assessment, risk management process

Self-assessment is a form of first-party verification and, while a valid method, is typically not as highly regarded as third-party verification.

In the live export industry, which is highly controversial from a public perspective and where little trust exists between advocates and protagonists, first-party verification is unlikely to alleviate any distrust or misgivings regarding supply chain performance. For that reason, first-party verification alone is unlikely to be able to support a worthwhile program or be acceptable to Government.

Similarly, second-party verification provided by an industry organisation would be treated with suspicion and do little to dissuade critics or fortify assurances. Second-party verification would expose the verifying organisation and the broader industry to increased risk and vilification.

Third-party verification is resource intensive and would be impossible on a routine basis. Consequently, a combination of first-party verification or self-assessment overseen and validated by third-party verification represents the most realistic alternative.

Such an approach would, via the ongoing monitoring and reporting of a unit's performance, provide assurance regarding practices during the inter-ESCAS audit period. One possible combination of self-assessment and third-party verification is presented below:

- Step 1: Regular self-assessment to monitor conformance with the Program.
- Step 2: Remote third-party verification to verify the self-assessment methodology and outcomes, as well as conformance within the Program.
- Step 3: On-site, third-party verification, possibly in combination with ESCAS auditing, to verify the process.

Related to the method of assessment is the frequency of assessment. A set schedule of assessment (for example annual) is useful when a program has one method of assessment (for example on-site audits); however, for combined assessment methods, a surveillance frequency determined by risk assessment would prove advantageous. This approach would also foster continual improvement within a unit as they would seek to reduce assessment frequency through the ongoing adoption of low risk activities.

Has training procedures and guidelines for those engaged through the supply chain

A key requirement in any QA or risk management program is that individuals operating within and under the program have an appropriate level of skill, education and capability to undertake the duties they are responsible for.

This means that individuals must:

- Understand what their responsibilities are in relation to conformance with a program;
- Have the appropriate capacities required to undertake their responsibilities and
- Be given appropriate training and education.

MLA and LiveCorp have developed animal handler training programs to complement the *Standard Operating Procedures for the Welfare of Livestock in Overseas Markets* for use in market. What is lacking is the more "administrative" or managerial training that will empower individuals within units to understand and improve risk, ensure compliance with any requirements and undertake monitoring and reporting functions.

Has reporting procedures for supply chain compliance performance and a structured data collection system to demonstrate compliance

Most QA programs require, as a minimum, that audit reports be provided not only to the program participant but also to the program owner.

A method for collecting and collating these reports, as well as outcomes from other assessment methods within the Program, will be useful and assist in developing a historical view of a particular unit's (and thereby the supply chain and industry) performance. Such data will demonstrate conformance within the Program and can be used to demonstrate that any incursions that do occur are atypical.

In order to facilitate the collection and collation of data, a centralised system for uploading data and accessing information would be advantageous.

Can be extended to all markets and species (existing and future)

Based on the research and the idiosyncrasies of the live export trade, the application of a QA program would require a flexible design such that it can:

- Consist of one overarching program, with a variation of standards, rules and reference materials for:
 - Cattle, sheep and goats.
 - Local market requirements (particularly around legislation, regulatory or cultural sensitivities).
- Be certified by an in-market certifier in order to address potential sovereignty, legal, financial and insurance liabilities and issues.

8. Recommendations

Table 15: Recommendations and references to further details

Recommendation	Rational/Explanation	Reference
<ul style="list-style-type: none"> That a QA program complemented by a risk assessment component (the Program) be developed to support the live export industry in aspiring to best practice and achieving ESCAS compliance. 	<ul style="list-style-type: none"> Recommended by Farmer Review. Industry program endorsed by DAFF. Fosters continual improvement and risk management. Will provide formal structures and consistent approaches for ESCAS compliance. Provide assurance during the inter-ESCAS audit period. 	<p>Section 8.1</p>
<ul style="list-style-type: none"> That industry seek to identify, accommodate and develop appropriate drivers for adoption of the Program including concessions from DAFF in relation to ESCAS audits. 	<ul style="list-style-type: none"> To encourage adoption and conformance. 	<p>Section 8.1</p>
<ul style="list-style-type: none"> That the management structure supporting the Program consist of a wholly owned Company as the owner complemented by supporting mechanisms to administer the Program. 	<ul style="list-style-type: none"> To maintain impartiality within the Program. To separate the Program from the Australian industry and Government (for the purposes of acceptance in sovereign nations). To ensure appropriate support mechanisms that will enhance the effectiveness of the Program. 	<p>Section 8.2</p>
<ul style="list-style-type: none"> That the Program commence as a flat structured program but with the flexibility to enable tiers to be introduced at a later stage if required. 	<ul style="list-style-type: none"> To allow the Program to be implemented sooner, rather than later. To enable the Program to evolve over time based on market and industry requirements. To minimise complexity and expense and encourage adoption. 	<p>Section 8.3</p>

Recommendation	Rational/Explanation	Reference
<ul style="list-style-type: none"> That, within the flat program structure, a conversion step exists to facilitate entry into the Program. 	<ul style="list-style-type: none"> In order to enable units to prepare and implement appropriate systems and procedures that will enable their certification. 	<p>Section 8.3</p>
<ul style="list-style-type: none"> That the Program be a certified program. 	<ul style="list-style-type: none"> A QA system underpinned by independent third-party certification is likely to be more credible, in the opinion of the Australian Government and detractors, than an uncertified program. Certification systems in general carry greater integrity and more developed methods for minimising or mitigating risk than uncertified systems. Certification would differentiate the Program from ESCAS. 	<p>Section 8.4 Section 8.7</p>
<ul style="list-style-type: none"> That certification be undertaken by independent certification bodies that meet specific requirements (as determined by the Program owner). 	<ul style="list-style-type: none"> To ensure impartiality. To leverage the core competencies of existing organisations that provide certification services. To ensure an appropriate level of understanding of the subject matter to enable accurate and consistent performance of the certification bodies and their auditors. 	<p>Section 8.4</p>
<ul style="list-style-type: none"> That multiple certification bodies be used, that these be market-centric and charged with certifying units within or in close proximity to that market. 	<ul style="list-style-type: none"> To mitigate any issues regarding acceptance of the program in sovereign nations. To enable the Program to be applied at the unit level. To leverage local knowledge. To allow market drivers to be exploited. 	<p>Section 8.4</p>

Recommendation	Rational/Explanation	Reference
<ul style="list-style-type: none"> That the Program be applicable at the unit level and, as such, allow individual units within a supply chain to achieve certification. 	<ul style="list-style-type: none"> To enable appropriate assurances regarding Program conformity to be made and verified at individual units and therefore across the supply chain. To empower units and foster continual improvement and attainment of best practice. To ensure units have appropriate accountability, responsibility and commitment to systems that provide assurance and verification. To secure a greater number of participants in the Program. To allow a wider range of market drivers to be exploited. 	<p>Section 8.5</p>
<ul style="list-style-type: none"> That the option for an Australian-based exporter to seek certification on behalf of a unit be made available. 	<ul style="list-style-type: none"> To encourage continual improvement at the unit level. To facilitate supply chain co-operation. In recognition of the resourcing limitations of some units. 	<p>Section 8.5</p>
<ul style="list-style-type: none"> That the Program use a combination of first-party and third-party verification methods. 	<ul style="list-style-type: none"> To ensure integrity within the Program and the credibility of the Program. To encourage self-assessment so as to encourage continual improvement. To minimise cost. 	<p>Section 8.6</p>
<ul style="list-style-type: none"> That the program uses a combination of remote and on-site assessment methods 	<ul style="list-style-type: none"> To enable more frequent assessment. To reduce time and costs associated with regular assessment. 	<p>Section 8.6 Section 8.7</p>
<ul style="list-style-type: none"> That the frequency of surveillance activities be determined based on risk. 	<ul style="list-style-type: none"> To foster continual improvement through the introduction of systems and processes that reduce risk and therefore the need for surveillance activities. 	<p>Section 8.8</p>

Recommendation	Rational/Explanation	Reference
<ul style="list-style-type: none"> That the Program allow for parallel operations while managing risk. 	<ul style="list-style-type: none"> In order to ensure the Program structure is flexible so as to accommodate the majority of units that may wish to participate. 	<p>Section 8.9</p>
<ul style="list-style-type: none"> That the greater requirements placed on units with parallel operations be determined based on risk assessment. 	<ul style="list-style-type: none"> So as to recognise the inherent risk associated with parallel operations. 	<p>Section 8.9</p>
<ul style="list-style-type: none"> That a set of standards be developed that has two compulsory elements for QA that are applicable to all units. 	<ul style="list-style-type: none"> To introduce formal systems and processes that will assist units in complying with ESCAS requirements. 	<p>Section 8.10.1 Appendix 2 Appendix 3</p>
<ul style="list-style-type: none"> That ESCAS requirements become normative elements under the Program Standards and adherence to these Standards be compulsory based on the unit's type of operation, with the exception of animal handling which is compulsory for all units. 	<ul style="list-style-type: none"> To mitigate suggestions of Government interference. To foster recognition of the Program as an industry initiative that can be adopted globally. Standardisation would indirectly serve to clarify ESCAS compliance requirements. 	<p>Section 8.10.1 Appendix 5</p>
<ul style="list-style-type: none"> That a phased introduction of the Program be considered to mitigate barriers of entry (cost, politics). 	<ul style="list-style-type: none"> Allows for the immediate introduction of some form of Program that will assist the industry. Enables the continual improvement and ongoing development of the Program. Allows the implementation of the program to evolve and respond to changing requirements. 	<p>Section 8.3</p>

Recommendation	Rational/Explanation	Reference
<ul style="list-style-type: none"> That a certification mark for the Program be developed and application made for trademark in all export markets. 	<ul style="list-style-type: none"> To provide the Program with a visual identity. To provide a means of differentiating those involved with the Program from those who are not. To protect the use of the certification mark in all export markets. 	<p>Section 8.10.2</p>
<ul style="list-style-type: none"> That a series of rules be developed governing the use of the certification marks and the Program requirements. 	<ul style="list-style-type: none"> To provide structure around the Program and the use of the certification marks. To meet requirements of trademarking authorities. 	<p>Section 8.10.3</p>
<ul style="list-style-type: none"> That conformance measures be developed. 	<ul style="list-style-type: none"> To enable the appropriate monitoring and corrective actions to be implemented in the case of identified non-conformance. 	<p>Section 8.10.4</p>
<ul style="list-style-type: none"> That other relevant Program related reference material be produced, including record keeping templates, training, procedures and manuals. 	<ul style="list-style-type: none"> To ensure all parties in the Program have the necessary tools, materials and resources to allow them to perform the duties and requirements of their role. 	<p>Section 8.10.5</p>
<ul style="list-style-type: none"> That, in developing such reference material for the Program, all existing material be modified to reflect use in the Program. 	<ul style="list-style-type: none"> To reduce the burden of developing required materials. To utilise resources with sunk costs. To minimise duplication. To ensure uniformity and consistency among resources. 	<p>Section 8.10.7 Appendix 6 Appendix 7</p>

Recommendation	Rational/Explanation	Reference
<ul style="list-style-type: none"> That separate standards, rules and codes of conduct be developed for participants in the Program, including the board, committee, service provider, certification bodies and auditors. 	<ul style="list-style-type: none"> To ensure all administrative parties are aware of and understand their responsibilities. As a means of monitoring the performance of all administrative parties within the program. To ensure all administrative parties perform their responsibility to the level required within the Program. 	<p>Section 8.4 Section 8.10.5</p>
<ul style="list-style-type: none"> That a centralised management system be introduced that will assist units in the adoption and conformance with the Program Standards and Rules. 	<ul style="list-style-type: none"> To facilitate standardised reporting. To allow efficiencies to be realised. To allow for external audits. 	<p>Section 8.11</p>
<ul style="list-style-type: none"> That key performance indicators be established for the Program 	<ul style="list-style-type: none"> As a measure to demonstrate the effectiveness of the Program. As a means of monitoring the Program and identifying areas for improvement or change. 	<p>Section 8.12</p>

8.1. Recommendation details

The development of a QA and risk assessment program (the Program) for the live export industry should be pursued to support exporters in aspiring to best practice and achieving ESCAS compliance.

The success or otherwise of the Program will largely depend upon the presence of drivers for participation. Industry should seek to identify, accommodate and develop appropriate drivers for adoption of the Program including concessions from DAFF in relation to ESCAS audits.

The objectives of the Program would be:

- To provide assurance to all parties directly involved in live export supply chains that their policies, systems and processes post disembarkation for the traceability, control and welfare of animals in their care are functioning effectively.
- To provide assurances to the live export industry's stakeholders that the policies, systems and processes for the traceability, control and welfare of animals in export markets are functioning effectively.
- To continuously improve the systems, processes and supporting procedures utilised for the traceability, control and welfare of animals at each unit in the supply chain.
- To enable all parties in the industry to identify areas of strength and excellence as well as areas in need of focused attention for continuous improvement in the short, medium and long-term and undertake regular critical self-assessment of activities, learning and teaching, improvement and support services.
- To provide benchmarking and an evidence-based approach to monitoring performance within the industry.

8.2. Management structure

In order to maintain impartiality within the Program and separate the Program from any one Australian industry body or government (for the purposes of acceptance in sovereign nations), it is recommended that the management structure supporting the Program consist of an independent company as the owner, complemented by the relevant supporting mechanisms to administer the Program. This structure is outlined in Table 16. Legal and professional advice will be required in establishing this entity.

The opportunity to leverage existing committees and support structures should be explored in establishing this company so as to minimise establishment and operating costs.

Table 16: Recommended Program management structure

Role	Structure
Owner	<p>The owner is a new, wholly owned company that retains ownership of the Program standards, rules and logos/marks.</p> <p>The board of this company should represent the key industry stakeholders and may include:</p> <ul style="list-style-type: none"> • Australian Livestock Exporters Council • Cattle Council of Australia • Goat Industry Council of Australia • LiveCorp • Meat & Livestock Australia • Sheepmeat Council of Australia
Standards Advisory and Integrity Committee	<p>Responsible for developing and defining the Program Standards and Rules, reviewing and updating the Standards and Rules and reviewing conformance reports and technical advice. Responsible for monitoring non-conformances and sanctions.</p> <p>This Committee would also be responsible for monitoring certifier and/or auditor competence, conformance and consistency.</p> <p>The Committee should include representatives from:</p> <ul style="list-style-type: none"> • Animal health and welfare technical advisor/s • Australian Livestock Exporters Council • LiveCorp • Meat & Livestock Australia • Service provider representative (see below)
Service Provider	<p>The service provider is responsible for the overall running of the Program. This includes administrative and communication responsibilities for the Program, the board and the committee.</p> <p>This role should be appointed to an external service provider.</p>
Certification Bodies	<p>The organisations that provide the auditing services and issue certificates of conformance. The responsibility for issuing certification would lie outside the audit team.</p> <p>Separate rules and standards for certifying bodies must be developed. Application to become an approved Program certifier must be made formally with the Program owner.</p>
Auditors	<p>The Auditors would be responsible for undertaking desktop and on-site audits, using the approved Audit Checklist provided, report audit outcomes as directed and upload outcomes to a central database. Auditors would be required to demonstrate subject specific capabilities to the certifier to audit under the Program, as defined in the standard. These may be ESCAS auditors provided they are able to demonstrate competence and subject matter expertise.</p>

8.3. Program structure and implementation

To facilitate implementation and adoption, it is recommended that the Program be introduced as a flat structured program, but with the flexibility to enable tiers to be introduced at a later stage, if required.

While a tiered structure provides a more obvious path for continual improvement, an aspirational pathway can be accommodated in a flat structure through the use of a surveillance frequency based on risk; the lower the risk, the less surveillance.

Within a flat Program structure, a conversion step would exist that facilitates entry into the Program. Following conversion, all units would remain on the one certified level, as shown in Table 17.

Table 17: Conversion and certified structure of the Program

	Conversion Level	Certified Level (ongoing)
Self-assessment	Prior to audit	Based on surveillance frequency
Desktop audits	Third-party	Based on surveillance frequency
On-site audit	Third-party	Based on surveillance frequency
Risk evaluation	Determines surveillance frequency	Determines surveillance frequency

Surveillance frequency based on risk creates an aspirational pathway for units within the Program.

It is anticipated that significant barriers to the immediate implementation of the program will be encountered (cost, politics) and it is therefore recommended that a phased introduction of the Program be considered. Staged implementation will allow for the immediate introduction of some form of Program to meet the industry's immediate needs and enable the continual improvement and ongoing development of the Program. A potential pathway for program implementation is presented in Table 18.

Table 18: Pathway for Program evolution

Timeframe	Progression
Immediate (Now)	<ul style="list-style-type: none"> • Gathering all existing MLA/LiveCorp resources and templates into a centralised access system (ExtraNet). • Review and standardisation of all resources. • Development of a Program "manual" incorporating all existing relevant resources as well as guidelines and policies for quality controls and Program documentation. • Development of training to integrate Program requirements, such as risk assessment, quality management and record keeping, with existing ESCAS requirements and training. • Targeted extension of the Program manual, resources and templates into supply chains and units.
Short-term (<12 months)	<ul style="list-style-type: none"> • Introduction of the Program as an uncertified assurance program guided by generic standards (allowing for species only) under a flat structure. • Development of Program standards and rules.
Mid-term (1-5 years)	<ul style="list-style-type: none"> • Introduction of certification. • Standards customised for markets. • Continuation of flat structure. • Agreement on DAFF concessions.
Long-term (5 years+)	<ul style="list-style-type: none"> • Certified program. • Tiered structure. • Applied through chain (Australia to export market slaughter).

8.4. Certification

Certification systems in general carry greater integrity and more developed methods for minimising or mitigating risk than uncertified systems. It is therefore recommended that the Program be a certified program (notwithstanding the Program pathway outlined in 8.3).

Market-centric certifiers responsible for certifying units within or in close proximity to that market should be appointed by the Company. Application to become an approved Program certifier would be made formally to the Company using the *Application to become a Certifying Body*. Specific criteria for the Certification Body should be developed and include:

- Independent.
- No conflict of interest.
- Possess an appropriate level of competence and expertise.
- Ensure that a subject matter expert is on the audit team at all times or that the auditors be trained and demonstrate subject matter expertise and competence in accordance with the Standards.
- Hold accreditation by an appropriate authority such as a being a member of the International Accreditation Forum (IAF) or equivalent and to an international standard such as a standard of the ISO in quality management systems or equivalent.

The Company would enter into contracts with certification bodies and such contracts would stipulate expected service levels.

Units applying for certification would be required to enter into a contract for services with a certifying body.

The decision to certify a unit would rest with the unit's certification body.

The decision to certify a unit cannot be made by the auditor who conducted the on-site or desktop audit/s; but rather, must be made by a designated certification decision-making entity within the certification body.

The certification body may certify an applicant if:

- No non-conformances are observed at an audit; and/or
- When an action plan satisfactorily addresses minor non- conformances and
- When any major non-conformances raised are closed out or downgraded to minor.

The certification body should update the audit report with details of activities undertaken to accept the action plan and/or close out or downgrade major non-conformances.

The certification body's decision making entity would confirm the grading of any non-conformances found during the audit.

The certification body should record the details of the certification of the client on the Program database within seven days of the date of report certification decision.

The certification body would issue the unit with its certificate and all attached schedules.

In order to ensure consistency in the operation of certification bodies, separate rules and standards for certifying bodies must be developed and include items such as:

- Application process
- Selection criteria
- Reporting requirements
- Codes of conduct, ethics etc
- Training and education requirements
- Certification processes
- Conformance measures
- Certification decision process
- Complaints procedures
- Contractual arrangements including fees

8.5. Unit recognition

It is recommended that the Program be first and foremost applicable at the unit level, rather than supply chain level, with the unit holding the certification. Supply chain recognition may flow by virtue of consistent unit participation across the supply chain. This would allow a unit to operate as a certified entity across a number of supply chains and the reporting of verification outcomes (and fees associated with verification) would reside with the unit. A register of certified units would be maintained, allowing an exporter to add new units to their supply chain in consideration of certification status. Exporters would be encouraged, through drivers identified during the development of the program (efficiencies, assurance, DAFF concessions), to ensure all units within their supply chain were certified.

8.6. Combined verification and assessment methods

In order to ensure integrity within the Program and the credibility of the Program, it is recommended that a combination of first-party and third-party verification methods be used to assess conformance with Program requirements. It is also recommended that a combination of remote and on-site assessment be utilised, as demonstrated in Table 19, to enable more frequent assessment without adding significantly to cost.

Table 19: Combinations of first- and third-party verification with remote and on-site auditing

First-party	Third-party
<ul style="list-style-type: none"> • Initial self-assessment 	<ul style="list-style-type: none"> • Initial desktop audit to verify self-assessment. • Initial on-site audit to verify all requirements.
<ul style="list-style-type: none"> • Ongoing self-assessment 	<ul style="list-style-type: none"> • Ongoing desktop audits of self-assessment outcomes. • Ongoing on-site audits to verify all requirements.

8.6.1. Approach for self-assessment

The self-assessment would be based on a *Self-assessment Template*, developed and approved by the Company. This can be used as supplied by the Company; however, there would also be an allowance for customisation to ensure the template was appropriate to the unit's operations. Such customisation would require Company approval. The self-assessment would include risk assessment.

Self-assessment would be undertaken by an individual within the unit or outsourced to an external assessor. That external assessor would not be associated in any way with the unit's certifying body.

Initial self-assessment

For new units entering the Program, the self-assessment must be undertaken as an initial self-assessment prior to the awarding of certification.

Ongoing self-assessment

Following an initial self-assessment, ongoing self-assessments would be undertaken at prescribed intervals and the outcomes submitted to the Company. The length of time between assessments would be determined by a risk rating allocated by an auditor during the *Surveillance Frequency Evaluation* (section 7.2) as part of the initial desktop and on-site audit. This frequency would be reviewed during each subsequent audit and could be increased or decreased depending on the outcomes of the audit.

Scope of self-assessment

The self-assessment would cover all requirements of the Program Standard. The self-assessment would be documented and records maintained as part of the unit's quality management system. These records would need to be made available as required through the audit process.

Process

The unit would need to integrate the self-assessment process into the unit's overall quality management system. A documented procedure would be established to delegate and define the responsibilities and requirements for planning and undertaking assessments as well as establishing records and reporting results.

Processes for selecting assessors and undertaking self-assessments would need to ensure objectivity and impartiality. Assessors would not be able to assess their own work.

The unit would need to ensure the individual responsible for undertaking the self-assessment (the assessor) has the appropriate skills, capabilities and understanding to perform the task.

The unit would also ensure appropriate training is provided to individuals responsible for undertaking self-assessments.

Records and results of assessments would be maintained.

The self-assessment outcomes would be uploaded to the Program database by the unit. Non-conformances would be flagged in the system and subject to increased scrutiny during initial auditing.

Non-conformances should be reported to the relevant manager and corrective actions implemented and documented.

8.6.2. Approach for desktop audits

The third-party desktop audit would be undertaken remotely by a certification body's auditor or audit team. The Company would establish a *Desktop Audit Checklist Template* and a *Desktop Audit Report Template*, as well as requirements for the submission of evidence remotely; likely via uploading documents and records to a central database.

Process

The desktop audits would be conducted in the following manner:

- The unit would submit electronically such documents and records as are required under the Program and in a format specified by the Company (in the Program's Standards and Rules). This would include self-assessment outcomes.
- Using the *Desktop Audit Checklist*, the auditor would review the records supplied by the unit to ensure conformance with the Standards and Rules.

After the desktop audit, the auditor would:

- Prepare a *Desktop Audit Report* that outlines the findings of the desktop audit including a recommendation for surveillance frequency.
- Submit the *Desktop Audit Report* to the certification body with copies being lodged with the Company (via the central database) and the unit (where the unit holds certification), or the exporter (where the exporter holds certification).

Approach for on-site audits

The third-party on-site audit would be undertaken at the unit's physical location by a certification body's auditor or audit team. The Company would establish an *On-site Audit Checklist Template* and an *On-site Audit Report Template*.

During an on-site audit, the auditor will be required to sight all relevant documents and evidence that will prove claims of conformance with the Program.

On-site audits would need to occur while the supply chain or unit is operating (ie handling supply chain animals).

Process

As part of the on-site audit using the *On-site Audit Checklist*, the auditor may undertake the following tasks:

- A review of all records and documentation required to support conformance claims.
- A traceability test on a randomly chosen animal which requires the auditor to follow the traceability data of the animal from entry at the unit to exit at the unit and/or across the supply chain from disembarkation to slaughter.

In instances of parallel operations with non-ESCAS consignments, the auditor shall test the traceability system to determine its ability to adequately segregate and record livestock. A sufficient number of samples will be taken to ensure the auditor is confident that the system is effective.

- A *Surveillance Frequency Evaluation* of the unit.
- A physical inspection of the unit.
- An audit exit meeting with the person responsible for managing risk related to the CCPs at the unit and explain the audit findings. During the exit meeting, the auditor would ensure the person responsible for Program conformity within the unit is aware of non-conformities that have been identified and actions that may be required.

After the on-site audit, the auditor would:

- Prepare an *On-site Audit Report* that outlines the findings of the audit. The audit report would be submitted to the company (via the central database) and the unit (where the unit holds certification), or the exporter (where the exporter holds certification) as well as being held on file by the certification body.
- Once the audit report has been submitted to the certification body, that certification body would make a ruling on certification and, if approved, issue the certificate.

8.7. Unit and supply chain assessment interaction

Unit certification is not necessarily linked to a supply chain and, as such, a certified unit may participate in multiple supply chains.

Certification only applies for the type of livestock that will be processed through that unit as part of an ESCAS supply chain.

8.8. Surveillance frequency determined by risk

To foster continual improvement within a unit, it is recommended that the frequency of re-occurring assessments and audits be determined based on the findings of a surveillance frequency risk evaluation undertaken during on-site and desktop audits by the third-party auditor.

8.8.1. Approach for surveillance frequency risk evaluation

The Company should establish *Surveillance Frequency Risk Evaluation Templates* for use by the third-party auditor which lists risk factors that impact the unit's ability to conform with the Program requirements and a score for each in terms of the level of risk associated with non-conformance that that factor presents.

This component should become a provision in the rules and standards and no deviation or modification of this approved list should be sanctioned.

The method for performing a surveillance frequency risk evaluation would also become a provision in the certification body's rules and standards, with service level requirements assigned in the contract between the certification body and the Company.

8.8.2. Method for developing the *Surveillance Frequency Risk Evaluation Template*

The *Surveillance Frequency Risk Evaluation Template* would vary based on a unit's operation and the livestock handled, for example some risk factors applicable to an abattoir would not appear in the *Surveillance Frequency Risk Evaluation Template* for a feedlot; likewise, a *Surveillance Frequency Risk Evaluation Template* for an abattoir handling cattle would be different to that used by an abattoir handling sheep.

In developing the *Surveillance Frequency Risk Evaluation Templates*, the Company would identify:

- The nature and types of risk events or causes of risk (risk factors).
- The consequences that can occur or the impact of the risk event.
- The control measure/s required to minimise or eliminate the risk.
- The level at which risk becomes acceptable or tolerable.
- The criteria for assigning points to the control measures.

Identification of risk factors

For the purposes of the surveillance frequency risk evaluation, risk factors are those events or causes of risk that would impact a unit's ability to conform with the Program requirements. This is fundamentally different to a unit's own risk factors which are more operationally focused (for example, the availability of backup generators in abattoirs).

The types of risk factors that should be considered in the development of the *Surveillance Frequency Risk Evaluation Templates* may include but not be limited to:

- **Sharing of operations**
The degree to which a unit shares operations between ESCAS supply chains and between ESCAS and non-ESCAS supply chains.
- **Traceability**
The identification system used to track an animal's entry into and exit from the unit.

- **Traceability procedures**

Traceability procedures relate to those that take place to ensure livestock are properly accounted for and reconciled and the frequency of these procedures.

- **Traceability reporting**

The frequency of reporting of all animals that have entered and exited the unit. More frequent reporting results in the identification of issues sooner and therefore faster application of risk mitigation activities.

- **Identification device management (cattle/abattoir)**

The methods for managing electronic identification devices post-slaughter.

- **Monitoring of unit**

The methods for monitoring operations within a unit would include aspects such as the appointment of Animal Welfare Officer/s.

Past performance

In addition to risk factors that the *Surveillance Frequency Risk Evaluation Templates* should include, consideration should also be given to the unit's performance during past self-assessments and audits. A unit's performance during its last self-assessment will be helpful in determining the effectiveness of the self-assessment process and the risk that self-assessment outcomes are not accurate.

Past performance is a good indicator of future performance and, therefore, an indicator of the unit's ability to continually meet Program requirements.

Feedback from the unit's performance under ESCAS should also be factored into the evaluation.

Identification of control measures

Once the risk factors have been identified, the Company should then identify the methods that could be utilised to control the risk through either reducing the probability of the risk event occurring or removing the possibility of the risk event occurring.

Assigning points

Once the risk factors and control measures that will be used in the Programs *Frequency Risk Evaluation Templates* have been identified, the Company should then employ a points allocation system which rates the control measures based on its ability to reduce the probability of the risk event occurring or remove the possibility of the risk event occurring.

The method for assigning points would be based on a scale of 1 to 5. The basis for the scale is provided in Table 20.

Table 20: Points assigned to risk factors

Points	Definition
1	The control measures in place effectively make the likelihood of the risk occurring rare.
2	The control measures in place significantly reduce the likelihood of the risk occurring.
3	The control measures in place slightly mitigate the likelihood of the risk occurring.
4	The control measures go some way to reducing or mitigating the likelihood of the risk occurring; however, a high probability of the risk occurring remains.
5	The control measures do not remove the risk factor and therefore the risk is likely to occur.

The risks and control measures identified by the Company, along with the points, would be transcribed into the *Surveillance Frequency Risk Evaluation Templates*, an example of which is provided as Table 21.

Table 21: *Example* Supply chain surveillance frequency risk evaluation template

Risk and control measure	Score
A. Leakage out of an ESCAS supply chain into a non-ESCAS supply chain	
Unit is shared by ESCAS and non-ESCAS supply chains but with <i>formal</i> systems in place to segregate and prevent leakage.	4
Unit is shared by ESCAS and non-ESCAS supply chains but with <i>informal</i> systems in place to segregate and prevent leakage.	5
The unit is not shared by ESCAS and non-ESCAS supply chains (see below).	0
B. Leakage out of an ESCAS supply chain into another ESCAS supply chain	
Unit is ESCAS only servicing single ESCAS supply chain.	1
Unit is ESCAS servicing multiple ESCAS supply chains but with <i>formal</i> systems in place to segregate consignments and prevent leakage.	2
Unit is ESCAS servicing multiple ESCAS supply chains but with <i>informal</i> systems in place to segregate consignments and prevent leakage.	5
The unit is shared not shared by ESCAS supply chains (see above).	0
C. Failure to fully account for an individual animal on entry/exit to the unit	
Mob-based recording - counting livestock in mobs on entry or exit (sheep only).	2
Individual electronic system (EID devices scanned on entry or exit) <i>with</i> visual tag back up.	1
Individual electronic system (EID devices scanned on entry or exit) <i>with no</i> visual tag back up.	3
Manual recording of a unique identifier (EID device or visual tag etc).	5
D. Failure to fully account for an individual animal on entry/exit to the unit	
Formally documented and understood traceability procedures are in place to ensure livestock are properly accounted for and reconciled.	2
Ad-hoc documentation and understanding of traceability procedures.	5

Risk and control measure	Score
E. Failure to fully account for an individual animal on entry/exit to the unit	
Traceability reports that account for all animals that have entered or exited a unit in that reporting period are generated <i>weekly</i> .	1
Traceability reports that account for all animals that have entered or exited a unit in that reporting period are generated <i>fortnightly</i> .	2
Traceability reports that account for all animals that have entered or exited a unit in that reporting period are generated <i>monthly</i> .	3
Traceability reports that account for all animals that have entered or exited a unit in that reporting period are generated <i>based on End of Processing Report period (cattle) or three times per year (sheep and goats)</i> .	5
F. EID devices are applied to livestock other than the original animal	
EID devices are removed from livestock post-slaughter and <i>destroyed</i> and a method exists to verify the destruction of all EID devices.	1
EID devices are devices removed from livestock post-slaughter and <i>returned</i> to the importer. A method exists to verify the return of all EID devices.	2
EID devices are devices removed from livestock post-slaughter and <i>kept</i> at the abattoir. A method exists to verify the security of all EID devices and reconciliation of devices.	4
A non-specified individual collects the EID devices and ad-hoc disposal.	5
G. Operational non-conformances with the Program may go undetected	
Unit has a designated Animal Welfare Officer <i>on site at all times</i> and established lines of reporting.	1
Unit has a designated Animal Welfare Officer <i>roving</i> and established lines of reporting.	2
General staff are responsible for ensuring non-conformance.	5

Past performance in the Program	Score
H. Results from the last self-assessment	
No major or critical non-conformances found.	1
Less than three minor non-conformance/s found.	2
Major or critical non-conformance/s found.	5
I. Results from the last desktop audit	
No major or critical non-conformances found.	1
Less than three minor non-conformance/s found.	2
Major or critical non-conformance/s found.	5
J. Results from the last on-site audit	
No major or critical non-conformances found.	1
<i>Less than three</i> minor non-conformance/s found.	2
<i>Major or critical</i> non-conformance/s found.	5
Feedback from ESCAS	Score
K. Reported performance under ESCAS (as directly applicable to the unit)	
No sanctions or major or critical non-compliances reported in the past 12 months.	1
<i>Major or critical</i> non-compliance/s reported in the past 12 months.	5
WORKINGS	
Total score from each risk area (A+B+C+D+E+F+G+H+I+K)	
RISK RATING	

Assigning a risk rating

The Program company will need to develop a risk rating system that can be used to determine the overall risk a unit presents and therefore the surveillance frequency that needs to be applied to that unit.

An example risk rating table is supplied as Table 22; however, the risk ratings and the corresponding percentage tolerances should be reviewed in more detail once all of the appropriate risk and control measures have been identified during the development of the *Surveillance Frequency Risk Evaluation Templates*.

Table 22: *Example risk ratings for a unit*

Rating	Score
Low Risk	<15
Medium Risk	16-35
High Risk	36-50

8.8.3. Risk rating to determine surveillance frequency

The Program will utilise a combination of self-assessment, desktop and on-site audit surveillance; however, the frequency with which these would occur would be determined based on the unit's risk rating. Table 23 provides an example of how risk rating correspondence to surveillance frequency.

Table 23: *Example surveillance frequencies based on risk ratings*

Rating	Score	Surveillance frequency	Activity
Low Risk	<15	Reduced Surveillance	<ul style="list-style-type: none"> Annual on-site audit 6 monthly desktop 6 monthly self-assessment
Medium Risk	16-35	Standard Surveillance	<ul style="list-style-type: none"> Annual on-site audit 3 monthly desktop 3 monthly self-assessment
High Risk	36-50	Enhanced Surveillance	<ul style="list-style-type: none"> Six monthly on-site audit 3 monthly desktop 3 monthly self-assessment

8.8.4. Use of the *Surveillance Frequency Risk Evaluation Templates*

During the desktop and on-site audits, the auditor should review the unit's standing against each risk factor and allocate the corresponding points to each factor using the *Surveillance Frequency Risk Evaluation Templates*.

As the templates include the points for each control measure, the auditor would not be required to work out points or perform calculations themselves, but rather select the most appropriate control measure and corresponding point on the template.

When this process is complete, the auditor would add points allocated together to calculate an overall score indicating the risk rating of the unit. The auditor would submit the surveillance frequency risk evaluation outcomes to the certification body as part of the relevant audit report as well as their recommendation for surveillance frequency.

8.9. Allowance for parallel operations

In order to ensure the Program structure is flexible so as to accommodate the majority of units that may wish to participate, it is recommended that the Program allows for parallel operations.

In the context of this recommendation, parallel operations are those in which a unit handles ESCAS and non-ESCAS supply chain livestock.

Given greater risk of leakage may exist within parallel operations, it is also recommended that additional requirements be placed on units incorporating parallel operations. This is achieved by assigning an increased risk rating and therefore a higher surveillance frequency to such units.

8.10. Formalised standards, rules and reference materials

8.10.1. Standards

In order to provide structure within the Program, it is recommended that a set of standards be developed by the company.

It is further recommended that these standards encompass:

- The elements for QA that are applicable to all units.
- The ESCAS requirements as normative elements with adherence to these elements being compulsory based on the unit's type of operation, except for the element relating to animal handling which would be compulsory for all units (Table 24).

It is also recommended that in designing the Program standards, the company ensures that the Program can incorporate new requirements as additional voluntary or compulsory elements. This will not only help ensure that the Program remains relevant and can evolve with trade requirements, but will also encourage in-market acceptance and participation by possibly being able to be extended to address local issues such as hygiene.

Table 24 shows how the various ESCAS requirements would convert to normative standards under the Program.

Table 24: Conversion of ESCAS requirements into normative Program standards

ESCAS requirement	Normative standard
Handling of Livestock	Element 3: Handling of Livestock
Land Transport of Livestock	Element 4: Transport of Livestock
Feedlot/Holding Facility	Element 5: Feedlot Operations
Lairage	Element 6: Lairage Operations
Slaughter with Stunning	Element 7: Slaughter with Stunning
Slaughter without Stunning	Element 8: Slaughter without Stunning

In preparing the standardisation of ESCAS requirements, it is recommended that the following documents be utilised in the compilation of standards:

- *DAFF Guidance on Meeting OIE Code Animal Welfare Outcomes*
- *MLA/LiveCorp's Supply Chain Procedures Checklist*
- *MLA/LiveCorp's Standard Operating Procedures*
- *The ESCAS Standard Compliance Model.*

Table 25 provides an overview of the three compulsory QA, risk management and handling of livestock elements and the five ESCAS related elements that should initially be developed for the program, as well as the outcomes for each.

Table 26 provides an indication of how each element would be applied by a unit based on its type of operation.

In addition, the following has been provided for consideration during the development of the Program.

- An indicative structure for the QA element (Appendix 2).
- An indicative structure for the risk management element (Appendix 3).
- An example of how various documents may be combined and standardised for the Program Element 3: Handling of Livestock (Appendix 4).

Table 25: Standard elements of the Program

No.	Standard Element	Outcome
1	Quality management system	That the unit formally establish, document, implement and maintain a quality management system and continually improve its effectiveness in accordance with the requirements of the Program Standards.
2	Risk management system	That the unit formally establish, document, implement and maintain a risk management system and continually improve its effectiveness in accordance with the requirements of the Program Standards.
3	Handling of livestock	The unit has systems and procedures in place to ensure that livestock are handled efficiently and in a way that minimises the risk of adverse animal health and welfare outcomes.
4	Land transport of livestock	The unit has systems and procedures in place to ensure that livestock are loaded, transported and unloaded appropriately to avoid pain and injury and minimise the risk of adverse animal health and welfare outcomes.
5	Feedlot operations	The unit has systems and procedures in place to ensure that facilities are designed, maintained and operated to hold and feed an appropriate number of livestock without compromising their welfare.
6	Lairage operations	The unit has systems and procedures in place to ensure that facilities are designed and constructed to hold and slaughter an appropriate number of livestock in relation to class and the throughput rate of the slaughterhouse without compromising the welfare of the animals.
7	Abattoir operations - Slaughter with stunning	<p>The unit has systems and procedures in place to ensure that facilities are designed, maintained and operated to hold and slaughter an appropriate number of livestock in relation to class and the throughput rate of the slaughterhouse without compromising their welfare.</p> <p>The unit has systems and procedures in place to ensure that, where performed, stunning effectively and reliably renders the animal unconscious to prevent suffering until it dies from blood loss.</p>
8	Abattoir operations - Slaughter without stunning	<p>The unit has systems and procedures in place to ensure that facilities are designed, maintained and operated to hold and slaughter an appropriate number of livestock in relation to class and the throughput rate of the slaughterhouse without compromising their welfare.</p> <p>The unit has systems and procedures in place to ensure that animals are restrained humanely and slaughtered competently to minimise any suffering involved.</p>

Table 26: An example of elements a unit would require based on operations

Description of unit under consideration for certification	Element							
	1	2	3	4	5	6	7	8
Individual unit - discharge from port and/or transportation								
Individual unit - feedlot/holding facility								
Individual unit - abattoir that slaughters with stunning								
Individual unit - abattoir that slaughters without stunning								

8.10.2. Certification marks

In order to provide the Program with a visual identity and means to differentiate units within the Program from those who are not, it is recommended that a certification mark be developed for the Program. Further, it is recommended that application is made for trademarking of the mark in all export markets.

It is important that in establishing and trademarking the certification mark, that industry seek appropriate professional legal and trademark advice in this area.

8.10.3. Rules

QA program rules typically govern the use of certification marks. As such, it is recommended that rules governing the use of the certification mark be developed and include:

- Who is involved in the Program (all parties).
- Each party's requirements and responsibilities.
- The method for gaining access to the Program, based on the party's role.
- The mechanism for assessment and verification, as well as reporting and performance requirements.
- Definitions of non-conformances and sanctions.
- Requirements relating to the payment of fees.
- Other administrative considerations such as privacy, disclaimers and registers.
- The visual representation of the certification mark.
- Usage guidelines for the certification marks.

8.10.4. Non-conformance measures

In order to provide a mechanism for determining the unit's performance in meeting the requirements of the Program, formal conformance measures need to be developed. Table 27 provides an indication of conformance measures that should exist within the Program.

Table 27: Non-conformance classifications for self-assessment

Category	Definition
Minor	In the opinion of the auditor, there has been a variance from the Program Standards or Rules that is not likely to directly impinge on the ability of the unit to conform to the Program.
Major	In the opinion of the auditor: <ol style="list-style-type: none"> <li data-bbox="405 757 1385 853">a. There has been an instance of variance from the Program Standards or Rules which has the potential to compromise the ability of the unit to conform with the Program or adversely affect the integrity of the Program or <li data-bbox="405 880 1385 943">b. the sum of minor non-conformances in an element is such that a systemic failure is likely to occur or <li data-bbox="405 969 1385 1032">c. there are reoccurring non-conformances which have not been addressed by corrective action.
Critical	In the opinion of the auditor: <ol style="list-style-type: none"> <li data-bbox="405 1144 1385 1211">a. There has been a failure to conform with the Program Standards or Rules which has or is certain to lead to the Program outcomes not being met or <li data-bbox="405 1238 1385 1305">b. there has been a reoccurring major non-conformance which has not been addressed by corrective action.

Further means of measuring and reporting conformance, as well as sanctions are outlined in Appendix 5.

8.10.5. Other reference materials

In order to ensure all parties involved in the Program have the required tools and materials, as well as the ability to utilise these tools and materials, it is recommended that a range of other reference items be developed.

This would include at the unit level:

- Application forms.
- Record keeping templates.
- Assessment templates and checklists.
- Appropriate example manuals.
- Standard operating procedures (where gaps exist).
- Pro forma contingency plans for various CCPs.
- Training materials (particularly for Elements 1 and 2).

In addition, appropriate materials should be produced for Program administrative purposes such as:

- Application forms for certification bodies.
- Audit templates and checklists.
- Standards and rules for certification bodies and auditors.
- Codes of conduct for certification bodies, auditors, the board and committees.
- Pro forma contracts such as those that would be required between the company and the service provider or the company and the certification bodies.
- Program certificates.

Appendix 6 and 7 include recommendations for creation of various reference materials where none currently exist.

8.10.6. Control of documents and records within the Program administration

In order to ensure reference material are controlled and therefore created and used in a compliant manner, the company should develop a control method would includes criteria to:

- a) Approve documents for adequacy prior to issue;
- b) Review and update as necessary and re-approve documents;
- c) Ensure that changes and the current revision status of documents are identified;
- d) Ensure that relevant versions of applicable documents are available at points of use;
- e) Ensure that documents remain legible and readily identifiable;
- f) Prevent the unintended use of obsolete documents and to apply suitable identification to them if they are retained for any purpose; and

- g) Itemise required components of documentation such as version number, title, file naming conventions, style including fonts and sizes etc.

In addition, records established for use in the Program to provide evidence of conformity to requirements should also be controlled. The company should also develop a documented procedure for the identification, storage, protection, retrieval, retention and disposition of records. Records should be legible, readily identifiable and retrievable.

Control of documents and records is a Program administrative consideration applicable to the Company, the service provider, the committee, the certification bodies and the auditors.

8.10.7. Use of existing materials

MLA and LiveCorp have already developed a significant number of resources that should be utilised as documents and reference materials within the Program.

It is recommended that, in developing reference material for the Program, all existing material be modified to ensure it meets the controls the Company implements above.

Specific recommendations for the modification or creation of materials are provided in Appendices 6 and 7.

8.11. Centralised management system

It is recommended that a centralised management system be introduced to provide a support platform for the Program. The objectives of this centralised management system would be to:

- Assist units in adopting and conforming with the Program Standards and Rules.
- Act as a central repository of all documents and templates required by all parties to the Program.
- Act as a gateway for regular first-party and third-party verification reporting.
- Act as an administration and reporting system for the company, board, committee, service provider, the certification bodies and the auditors.
- Act a certification register for the units.

In developing this system, the following process should be followed:

- A scoping stage in which specific user requirements and technical specifications for the systems are documented in detail.
- A developer for the system is appointed based on competitive tender.
- A prototype is built and tested with a sample of users.
- The final system is built, tested and released.

Key attributes of a central management system would include:

- **Program application:**
 - Initial application by participants including payment of any fees.
 - Application confirmation - automated system.
 - Appointment of certification body - including scheduling of first desktop and on-site audit.
 - User access – user login to update profile and check progress of application.
- **Certification body application:**
 - Initial application by certification bodies - including payment of any fee.
 - Application confirmation – automated system.
 - Certification body user access – to update profile and check progress of application.

- **Notifications and alerts for:**
 - Pending, due or overdue self-assessments, desktop audits and on-site audits.
 - Changes in risk ratings, surveillance frequency and certification status.
 - Outcomes of audits.
 - This would be accessible to units, certification bodies and auditors.
- **Self-assessment assistance:**
 - Functionality to enable units to complete and upload self-assessments (including attachment/upload of supporting documentation).
- **Desktop audit assistance:**
 - Functionality to enable units to upload relevant documentation required for desktop audit.
 - Functionality to enable auditors to complete desktop audits.
- **On-site audit assistance:**
 - Functionality to enable certification bodies and auditors to upload on-site audit information including reports, outcomes, corrective actions, follow up etc.
- **Reporting:**
 - Performance monitoring specific to each stakeholder.
- **Administration:**
 - User login – ability for all stakeholders to login with varying user security profiles and data access.
 - Ability for certification bodies to generate certificates.
- **Supporting materials:**
 - Access to all relevant Program material including standards and rules, requirements, templates, pro formas, educational documents and resources.
- **Search:**
 - Ability to conduct a search for certified units (with information displayed determined by the searcher's access level).
 - Ability to conduct a search for approved certification bodies (with information displayed determined by the searcher's access level).
- **ESCAS interaction:**
 - Consideration should be given to how this system may complement or facilitate ESCAS reporting requirements.

8.12. Program key performance indicators

In order to ensure the Program is meeting its objectives and to provide a quantitative means of measuring the performance of the overall Program, a number of factors have been identified that may form the basis of key performance indicators for the Program:

- **The uptake of the Program**
 - The number of units entering the Program.
 - The number of units that enter the program and achieve Certification.
 - The number of units that leave of the Program and the reason.
 - The length of time units remain in the Program.
- **The ability of the Program to achieve objectives**
 - The aggregate total number of non-conformances over a period of time (by type).
 - The number of non-conformances closed out and the timeframe for close out.
 - The number of units at each risk level (high, medium, low).
 - The aggregate total change in risk level (units moving from low to high).
- **The Program's impact on exporter costs of compliance with ESCAS**

APPENDIX 1: Content of email sent to exporters

Dear [name]

Through our meeting, I am hoping to gain an insight into the ESCAS compliance procedures and associated documentation you have in place or under development throughout your various supply chains to address the specific risks (or critical control points) associated with those supply chains. I would also appreciate your thoughts on how effective these measures are.

I am also hoping to assign a cost to ESCAS compliance and would appreciate your insight into the cost of compliance associated with each procedure identified above.

To be more specific, a few discussion points I would like to broach in a step by step discussion regarding processes, policies, procedures and systems include:

- What processes and policies do you have in place to achieve ESCAS compliance?
 - What happens at each step?
 - Who is responsible (role, not the personal details)?
 - What record keeping is required (copies would be appreciated)?
 - Does the record keeping include reference system to aid filing and accountability (date, signature etc)?
 - How long does each step take (hours)? If you are unsure of this, would it be possible to consult with the person responsible for the task?
 - What costs are associated with each step (hidden and direct)?
 - How is the information recorded - manually or in a system?
 - If a system, what system?
 - Who is responsible for data entry?
 - When does the data entry usually occur - immediately, x days later?
 - How long does this take; what is the resource requirement (what proportion of full time labour unit etc)?
 - What kind of reporting do you have in place to review data recording?
 - What contingency plans do you have in place?
 - What is the cost of these?
 - What form of documentation do you have for staff so they are familiar with the processes (SOP? Is a copy available)?
 - Are staff provided training on processes - is it part of induction or more information, is training recorded?
 - Who oversees compliance with the policies/procedures/systems? What is the line reporting process?
-

- Do you review their processes/policies - if so what frequency, formal/informal?
- What have the outcomes of past reviews been?
- What is your track record on non-compliance/compliance internally?
- What happens as a result of non-compliance?
- What would help you streamline the process/create efficiencies?
- What information are you retaining and what information is being passed on to the Government?
- How is this being done?
- Can the system be made more efficient?
- Are there obvious areas of duplication of systems or paper work?

APPENDIX 2: Element 1 - Quality management systems

A quality management system reflects a unit's structure, procedures, processes and resources focused on implementing quality management.

Under the Program a unit would be required to formally establish, document, implement and maintain a quality management system and strive to continually improve its effectiveness in accordance with the requirements of the Program standards.

A quality management system will facilitate a unit's recording keeping, adherence to operating procedures, traceability, risk management, animal welfare practices and control.

The following components may be made provisions in the Program's standards and rules.

Quality plan

The unit would be required to have a documented quality plan that should include:

- a) A quality policy outlining the unit's commitment to developing and maintaining a QA system for the Program;
- b) Reference to documented standard operating procedures and records required to ensure conformance with the Program Standard;
- c) Reference to documents, including records, determined by the unit to be necessary to ensure the effective planning, operation and control of its processes in relation to the Program;
- d) An overview of management responsibility and authority for the quality system and ensuring conformance with the Program;
- e) An outline of resource and infrastructure management that will support conformance with the Program;
- f) Measures for monitoring and measurement of the performance of the quality system;
and
- g) Continual improvement processes.

Control of documents

Documents are considered to be structured items of information recorded in any format; they are generally instructional in nature. Some documents may also be records.

Documents required by the quality management system must be controlled. Control of documents is important in the development of document templates that are used as part of the quality management system and also in the use of document templates for record keeping activities.

The unit would establish a documented procedure to define the controls needed for both development and usage as follows:

Document development - controls to:

- a) Approve documents for adequacy prior to issue;
- b) Review and update as necessary and re-approve documents;
- c) Ensure that changes and the current revision status of documents are identified;
- d) Ensure that relevant versions of applicable documents are available at points of use;
- e) Specify file naming protocols and any required numbering or referencing system;
- f) Ensure that documents remain legible and readily identifiable;
- g) Ensure that documents of external origin are identified and their distribution controlled;
- h) Prevent the unintended use of obsolete documents and identify such documents if they are retained for any purpose; and
- i) Ensure all relevant personnel are aware of their requirements for completing and submitting documents.

A *Document Register* should be maintained to control the release and versioning of documents developed for use as part of the quality management system.

Document usage - controls to specify:

- a) The type of document;
- b) When the document is to be used;
- c) Who is responsible for completing the document;
- d) What is to be recorded on the document;
- e) The correct document format, file name and referencing;
- f) When the document is to be submitted; and
- g) Who the document is to be submitted to.

Required documents

Documents supporting conformance with the relevant the Program level and element must be retained by the unit.

Depending on the type of unit, these may include items outlined in Table 28, below. Italicised items indicate documents that should be developed by the Company and become informative components of the Program Standards.

Refer to the *Documents Register* in Appendix 6 for further details about the Program documents. Various documents are already being used in market and will be brought into the Program where possible to minimise confusion, duplication and supply chain disruption. This Appendix includes guidance on which records need to be modified or created.

Table 28: Types of documents required for the Program

<ul style="list-style-type: none"> • Supply chain chart and explanation of the structure 	<ul style="list-style-type: none"> • <i>Stevedore Training Certificate</i>
<ul style="list-style-type: none"> • <i>A Contract Register</i> 	<ul style="list-style-type: none"> • <i>Truck Driver Training Certificate</i>
<ul style="list-style-type: none"> • <i>A Supply Chain Unit Register</i> 	<ul style="list-style-type: none"> • <i>Feedlot Animal Handler Training Certificate</i>
<ul style="list-style-type: none"> • Standard operating procedures 	<ul style="list-style-type: none"> • <i>Abattoir Animal Handler Training Certificate</i>
<ul style="list-style-type: none"> • <i>Contingency Plan for Stunner Failure</i> 	<ul style="list-style-type: none"> • <i>Self-assessment</i>
<ul style="list-style-type: none"> • <i>Risk Register</i> 	<ul style="list-style-type: none"> • <i>Record of Conformance Issues and Actions</i>
<ul style="list-style-type: none"> • <i>Risk Treatment Plan</i> 	

Standard operating procedures

It is recommended that a unit have documented standard operating procedures (SOPs) that detail the necessary tasks, steps, activities, processes and reporting required to ensure conformance with the Program Standard.

In adopting SOPs, the unit may utilise the MLA/LiveCorp:

- *Standard Operating Procedures for the Welfare of Livestock in Overseas Markets*
- *Animal Welfare Officer Standard Operating Procedures*
- *Traceability Standard Operating Procedures*
- *Reporting of Non-conformance Standard Operating Procedures*

The SOPs referred to above may be used by the unit in their entirety or the unit may develop their own based on the above documents.

Control of records

Records are considered to be information created, received and maintained as evidence and information by a unit in pursuit of the Program certification or registration.

Records established to provide evidence of conformity to requirements and of the effective operation of the quality management system should be controlled.

The unit should establish a documented procedure to define the controls needed for the identification, storage, protection, retrieval, retention and disposition of records. Records should remain legible, readily identifiable and retrievable.

Required records

Records supporting conformance with the relevant Program level and element must be retained by the unit. Depending on the type of unit, these may include items outlined in Table 29 below. Italicised items indicate records that should be developed by the Company as templates and form part of the informative Standards of the Program.

Similar record keeping templates are currently being used and, where possible, these should be repurposed for use in the Program. Adoption of existing templates will assist transition to the Program and minimise the need for participant training.

Refer to the *Records Register* in Appendix 7 for further details about the Program records. This Appendix includes guidance on which records need to be modified or created.

Table 29: Types of records required for the Program

<ul style="list-style-type: none"> • A <i>Contract Register</i> with copies of contracts or proof that confirms control of the all units in the supply chain 	<ul style="list-style-type: none"> • Reconciliation reports of animals counted on and off transport
<ul style="list-style-type: none"> • A <i>Supply Chain Unit Register</i> that provides a list of names and contacts of units in the supply chain 	<ul style="list-style-type: none"> • Reconciliation reports of animals counted in and out of facilities
<ul style="list-style-type: none"> • End of processing reports (cattle) 	<ul style="list-style-type: none"> • Record of mortalities
<ul style="list-style-type: none"> • Records of animal health certificates 	<ul style="list-style-type: none"> • Copies of all internal and external assessments including audit reports
<ul style="list-style-type: none"> • <i>Ship Discharge and Trucking to Feedlot Report</i> 	<ul style="list-style-type: none"> • <i>Record of Conformance Issues and Actions</i>
<ul style="list-style-type: none"> • <i>Feedlot Unloading Report</i> 	<ul style="list-style-type: none"> • Transport documents
<ul style="list-style-type: none"> • <i>Daily Feedlot Inspection Report</i> 	<ul style="list-style-type: none"> • Packing List
<ul style="list-style-type: none"> • <i>Weekly Feedlot Inspection Summary</i> 	<ul style="list-style-type: none"> • <i>Stevedore Training Log</i>
<ul style="list-style-type: none"> • <i>Feedlot Discharge and Trucking to Lairage/Abattoir Report</i> 	<ul style="list-style-type: none"> • End of voyage report
<ul style="list-style-type: none"> • <i>Lairage Unloading Report</i> 	<ul style="list-style-type: none"> • <i>Feedlot Animal Handler Training Log</i>
<ul style="list-style-type: none"> • <i>Daily Lairage Inspection Report</i> 	<ul style="list-style-type: none"> • <i>Abattoir Animal Handler Training Log</i>
<ul style="list-style-type: none"> • <i>Daily Abattoir Inspection Report</i> 	<ul style="list-style-type: none"> • <i>Self-assessment</i>

• <i>Weekly Abattoir Report</i>	• Export Permit
• <i>Tag Replacement Advice</i>	• <i>Risk Register</i>
• Trucking dockets and records	• <i>Risk Treatment Plan</i>
• <i>Truck Driver Training Log</i>	• Vessel Load Plan
• <i>Stunner Maintenance Log</i>	

Management commitment

A fundamental requirement of a quality assurance program is a documented commitment by senior management to the program.

Element 1 of the Program should require a unit's senior management to show their commitment to the program by:

- a) Communicating throughout the unit the importance of meeting the requirements of the program;
- b) Establishing and publishing a quality policy;
- c) Conducting management reviews;
- d) Ensuring the availability of resources; and
- e) Establishing formal responsibility and authority for the program.

Evidence of this management commitment can be provided by a unit through formal written policies and procedures relating to the above points.

Responsibility and authority

The management structure of the unit should be such that responsibility for the Program resides with a nominated management position, irrespective of other responsibilities.

The intention would be to ensure that the Program be recognised and supported at a high level within the unit and reinforces the unit's commitment to continual improvement.

This role may be a wholly dedicated the Program role or this may form part of an existing role (such as that of a Supply Chain Manager, Animal Welfare Officer or a broader quality assurance role).

How this role is incorporated into the unit's structure is at the discretion of the unit seeking to participate in the program.

This role would have responsibility and authority for:

- a) Ensuring that processes needed for the quality management system are established, implemented and maintained; and
- b) Reporting to senior management on the performance of the quality management system and any need for improvement.

Management review

Element 1 of the Program would require that senior management review the unit's quality management system at planned intervals to ensure its continuing suitability, adequacy and efficacy. This review should include assessing opportunities for improvement and the need for changes to the quality management system, including the quality policy.

Records from management reviews should be maintained.

Review input

The input to management review could include information on:

- a) Results of audits;
- b) Outcomes from ESCAS reporting;
- c) Supply chain and customer feedback;
- d) Status of preventive and corrective actions;
- e) Follow-up actions from previous management reviews;
- f) Changes that could affect the quality management system; and
- g) Recommendations for improvement.

Review output

The output from the management review should include any decisions and actions related to the improvement of the effectiveness of the quality management system and its processes.

Resource management

Provision of resources

The unit would determine and provide the resources needed to implement and maintain the quality management system and continually improve its effectiveness.

Competency, training and awareness

The unit would be required to:

- a) Determine the necessary level of competence for personnel performing work affecting conformity to the Program requirements;
- b) Where applicable, provide training or take other actions to achieve the necessary competence;
- c) Evaluate the effectiveness of the actions taken;
- d) Ensure that its personnel are aware of the relevance and importance of their activities and how they contribute to the achievement of the quality objectives; and
- e) Maintain appropriate records of education, training, skills and experience.

The unit would be required to stipulate the level of training that is required among personnel whose activities directly impact the unit's performance under the Program. As a minimum, this level of training should include the *MLA/LiveCorp Standard Operating Procedures Training* for the:

- *Handling of Australian Livestock*
- *Land Transport of Australian Livestock*
- *Feedlot Operations*
- *Lairage Facilities*
- *Slaughter with Stunning*
- *Slaughter without Stunning*
- *The Development of a Quality Management System*
- *The Development of a Risk Management System*

Infrastructure

The unit should determine, provide and maintain the infrastructure needed to achieve conformity to the Program requirements.

Infrastructure includes, as applicable:

- a) Buildings, workspaces and associated utilities;
- b) Process equipment; and
- c) Supporting services (such as transport, communication or information systems).

Monitoring and measurement

The unit should conduct internal assessments at intervals determined by risk based surveillance frequency methods (refer Element 2) to determine whether the quality management system is:

- a) Consistent with the planned arrangements the unit determined in the quality plan;
- b) Consistent with the requirements of the Program;
- c) Consistent with any other quality management requirements established by the unit;
and
- d) Effectively implemented and maintained.

Process

The internal self-assessment should include assessment of the quality management system, the risk management system and the relevant supply chain elements.

The process for internal self-assessment should be documented and provide details relating to:

- a) The assessment criteria, scope and methods;
- b) The criteria for selection of internal assessors;
- c) The manner in which the assessment should be conducted;
- d) The record/s that must be established as part of the assessment;
- e) The method of storing and controlling the assessment record/s;
- f) The method for documenting and reporting assessment outcomes and to whom;
- g) The method for ensuring any necessary corrections and corrective actions are taken without undue delay; and
- h) Follow up activities including the verification of the actions taken and the reporting of verification results.

Documenting self-assessment

The self-assessment must be documented using the *Self-assessment* template. This form may be used as supplied by the Company or adapted to suit the unit's quality management requirements, provided that all items contained in the *Self-assessment* template are included in the unit's adaptation.

The self-assessment documentation must be maintained on-site and be made available during external on-site or desktop audits.

Conformance

In self-assessments, the conformance classifications of minor, major and critical, as outlined in Table 30, will apply and should be used when identifying types of non-conformances. The assessor must be able to provide the rationale behind how the non-conformance category was decided upon.

Table 30: Conformance classifications for self-assessment

Category	Definition
Minor	In the opinion of the assessor there has been a variance from the Program standards or rules that is not likely to directly impinge on the ability of the unit to conform to the Program.
Major	In the opinion of the assessor: <ul style="list-style-type: none"> d. There has been an instance of variance from the Program standards or rules which has the potential to compromise the ability of the unit to conform with the Program; or e. the sum of minor non-conformances in an element is such that a systemic failure is likely to occur; or f. there are reoccurring non-conformances which have not been addressed by corrective action.
Critical	In the opinion of the assessor: <ul style="list-style-type: none"> c. There has been a failure to conform with the Program standards or rules which has or is certain to lead to the Program outcomes not being met; or d. there has been a reoccurring major non-conformance which has not been addressed by corrective action.

Conformance measures

A documented procedure should be established to define the controls and related responsibilities and authorities for dealing with non-conformances.

As a minimum, the unit's conformance control and measures documentation should be included.

Minor Non-conformance

- Where a minor non-conformance is identified during a self-assessment, the non-conformance should be described on the *Self-assessment* template.
- Where a minor non-conformance is identified outside a self-assessment, this should be recorded on the *Record of Conformance Issues and Actions* form.

- Where a minor non-conformance is identified, the unit must remedy the non-conformance by undertaking relevant corrective action.

The unit should maintain records of the nature of corrective actions taken using the *Record of Conformance Issues and Actions* form and refer to such documentation during a self-assessment, on-site or desktop audit.

Failure by the unit to correct a non-conformance within the time frame specified by an assessor may result in a minor non-conformance being elevated to a major non-conformance.

Major non-conformance

- Where a major non-conformance is identified, the non-conformance should be described on the *Self-assessment* form.
- Where a major non-conformance is identified outside a self-assessment, this should be recorded on the *Record of Conformance Issues and Actions* form.

Where a major non-conformance is identified, the unit must remedy the non-conformance by undertaking relevant corrective action.

The unit should maintain records of the nature of corrective actions taken using the *Record of Conformance Issues and Actions* form and refer to such documentation during a self-assessment or on-site or desktop audit.

Failure by the unit to correct a non-conformance within the time frame specified by an auditor or assessor may result in the major non-conformance being elevated to a critical non-conformance.

Critical non-conformance

- Where a critical non-conformance is identified, the non-conformance should be described on the *Self-assessment* form.
- Where a critical non-conformance is identified outside a self-assessment, this should be recorded on the *Record of Conformance Issues and Actions* form.

Where a critical non-conformance is identified, the unit must remedy the critical non-conformance by undertaking relevant corrective action.

Corrective action

A documented procedure should be established to define requirements for corrective action/s including:

- Reviewing non-conformances (including complaints);
- Determining the causes of non-conformances;

- Evaluating the need for action to ensure that non-conformances do not recur;
- Determining and implementing action needed;
- Recording of the results of action taken; and
- Reviewing the effectiveness of the corrective action taken.

Actual corrective actions may involve one or more of the following:

1. Taking action to eliminate the detected non-conformance; or
2. Taking action to preclude its original intended use or application.

In determining procedures and corrective actions, the unit should ensure that such actions prevent recurrence and are appropriate to the effects of the non-conformance encountered.

Recording of non-conformance and corrective actions

Records of the nature of non-conformance and any subsequent actions taken, including concessions obtained, shall be maintained using:

- In the case of self-assessments, the *Self-assessment* form.
- In the case of identification by the unit during operations (not when a self-assessment is occurring), the *Record of Conformance Issues and Actions* form.

Such records of non-conformance should be completed when non-conformance is identified as part of the self-assessment, desktop audit, on-site audit or during the normal course of the unit's operation.

Analysis of data

The unit should determine, collect and analyse appropriate data to demonstrate the suitability and effectiveness of the quality management system and to evaluate where continual improvement of the effectiveness of the quality management system can be made.

This shall include data generated as a result of monitoring and measurement and from other relevant sources including conformance reporting. The analysis of the data should be conducted by those identified in the quality plan and as part of the senior management review.

Reporting of non-conformance

The reporting of non-conformance internally, as well as to the relevant certifying body and the Company, will be based on the type of non-conformance, the level of certification, the detection method and the designated surveillance frequency for that unit, as outlined in Table 31 below.

Table 31: Reporting frequency for non-conformance

Detection method	Type of non-conformance		
	Minor	Major	Critical
Self-assessment	Surveillance frequency	Surveillance frequency	Surveillance frequency
Business operations	Not required	Within 28 days of identification	Within 15 days of identification

Continual improvement

The unit shall seek to continually improve the effectiveness of the quality management system through the use of the quality policy, assessment and audit results, analysis of data, corrective and preventive actions and management review.

Quality manual

The quality manual contains the details of the quality plan. The Company would develop a quality manual template that a unit could use in its entirety or in part to establish and maintain their own quality manual. Such a manual would include:

- a) The scope of the quality management system in that it is limited to conformance with the Program (unless the organisation chooses to extend the quality management system to other areas of their operation);
- b) The documented procedures established for the quality management system such as the quality policy, standard operating procedures, protocols, codes of conduct, training and work instructions;
- c) Reference documents such as World Organisation for Animal Health (OIE) Code for the land transportation and slaughter of livestock, the DAFF Guidance on meeting the OIE Code;
- d) The records that must be kept as part of the quality management system; and
- e) Recording templates or instructions.

APPENDIX 3: Element 2 - Risk management systems

A risk management system consists of a unit's structure, procedures, processes and resources focused on identifying, assessing and prioritising risk and its coordinated approach to minimising, monitoring and controlling the probability and impact of risk events.

This section relates to the unit's risk management system and contingency plans.

As a requirement of the Program, a unit must formally establish, document, implement and maintain a risk management system and seek to continually improve its effectiveness in accordance with the requirements of the Program standards. The following components relate to items that could be incorporated into Element 2 – Risk management system.

Risk management plan

The purpose of a risk management plan is to allow the unit to identify and record potential risk. The plan also allows mitigation strategies to be developed and tracked.

A risk management plan can also be used to minimise the likelihood of non-conformance with the Program and plan corrective actions should non-conformance occur.

The unit would be required to have a documented risk management plan that should include:

- A documented risk management policy;
- Accountabilities and responsibilities for managing risk;
- The way in which risk management performance will be measured and reported;
- The risk management framework; and
- The method for reviewing and improving the risk management policy, plan and framework periodically and in response to an event or change in circumstances.

Accountability and responsibility

The unit should ensure that there is accountability, authority and appropriate competence for managing risk, including implementing and maintaining the risk management process and ensuring the adequacy, effectiveness and efficiency of any controls.

The unit should define accountability and responsibility by documenting:

- The identification of risk owners that have accountability and authority to manage risks;
- The identification of who is accountable for the development, implementation and maintenance of the framework for managing risk;
- The identification of other responsibilities of people at all levels in the unit for the risk management process; and
- The establishment of performance measurement and external and/or internal reporting and escalation processes.

Resources

The unit should determine and provide the resources needed for risk management. Consideration should be given to the following:

- People, skills, experience and competence;
- Resources needed for each step of the risk management process;
- The unit's processes, methods and tools to be used for managing risk;
- Documented processes and procedures; and
- Training programs and records of education, training and skills.

Monitoring and review of the risk management framework

In order to ensure that risk management is effective and continues to support the unit's performance, the unit should:

- Measure risk management performance against indicators which are periodically reviewed for appropriateness;
- Periodically measure progress against and deviation from the risk management plan;
- Periodically review whether the risk management framework, policy and plan are still appropriate, given the unit's external and internal context;
- Report on risk, progress with the risk management plan and how well the risk management plan is being followed; and
- Review the effectiveness of the risk management framework.

Risk management framework

In order to ensure that risks are identified in a consistent manner across the unit, it is recommended that a risk management framework be implemented.

This will allow for the:

- Identification of risks;
- Analysis of the risk in terms of the likelihood of occurrence and consequences;
- Ranking of risks in priority order; and
- Treatment of priority risks.

Risk identification

Using the Programs *Risk Register Template* (Table 32), a unit would identify risks within the its operation that would impact its ability to conform with the Program standards.

Risk analysis

Once risks have been identified, the unit would consider the areas impacted by the risk event, the potential consequences and the likelihood of occurrence. These risks, with their impact and likelihood defined, are then prioritised.

Definitions

- *Likelihood*: Probability of the risk occurring.
- *Impact*: The impact is based on an assessment of the impact of the risk on the unit in regard to its ability to comply with the Program. Conformance terminology (ie minor, major) has been used here as risks identified at these levels should correspond.

Points

In order to determine likelihood and impact, each risk should be given points for both.

The Standards should include the Company approved guidance for risk points.

In providing this as a guide in the Standards, it will avoid units having to develop their own risk criteria which may be arbitrarily determined, inconsistent or, in some cases, too difficult for the unit to perform.

Table 33 lists the recommended risk points for likelihood and impact for use in the Program.

Table 32: Likelihood and impact points for risks

Likelihood of occurrence		Impact	
Rare	1	Important	1
Unlikely	2	Minor	2
Moderate	3	Moderate	3
Likely	4	Major	4
Almost certain	5	Catastrophic	5

Prioritising risk

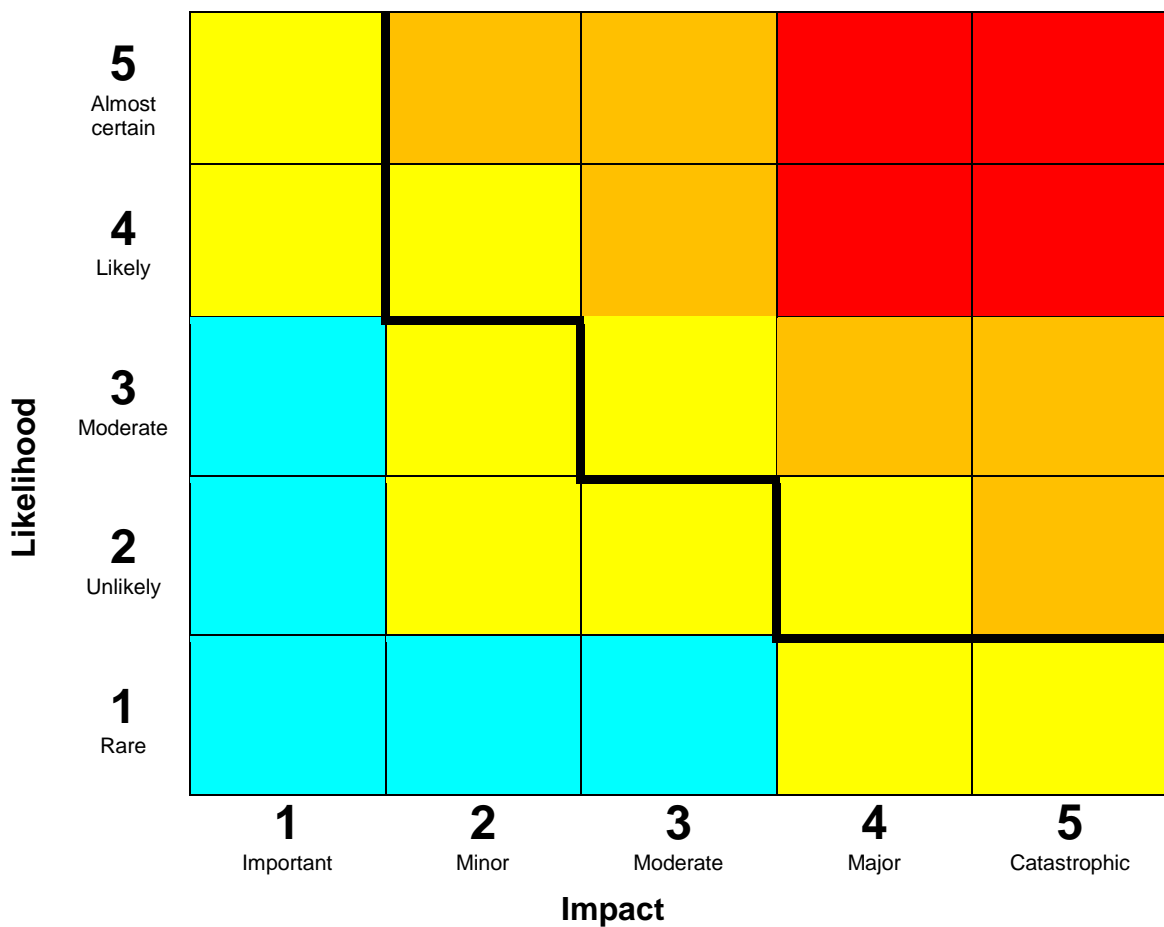
The risk identification and analysis process generally produces a long, unstructured list of risks. In order to determine the order of priority for risk treatment activities, the unit should use a risk matrix to establish a threshold above which risks will not be tolerated or will receive additional treatment.

For example, in the *Risk Matrix for Scoring and Prioritising Risk* shown in Figure 4, the threshold is set at risks that scored 8 or above based on likelihood and impact (calculated by multiplying the rating for likelihood by the rating for impact). Any risk sitting to the right of the thick black line in Figure 4, representing the threshold on the risk matrix, is a zero-tolerance risk.

The unit should use this information to create a *Priority Risk Table and Treatment Plan* which is used to document the risks that require treatment, their priority and the action required to treat the risk. An example *Priority Risk Table and Treatment Plan* is provided in Table 33.

The unit must conduct regular risk assessments and make these risk assessments available during audits.

Figure 4: Risk Matrix for Scoring and Prioritising Risk



Risk treatment

The unit would develop a *Risk Treatment Plan* (based on the example in Table 33) that outlines how they would avoid, minimise, remove or mitigate identified risk.

Risk treatment options are not necessarily mutually exclusive or appropriate in all circumstances. The options can include the following:

- Avoiding the risk by deciding not to start or continue with the activity that gives rise to the risk;
- Taking or increasing the risk in order to pursue an opportunity;
- Removing the risk source;
- Changing the likelihood;
- Changing the consequences;
- Sharing the risk with another party or parties (including contracts); and
- Retaining the risk by informed decision.

Preparing and implementing risk treatment plans

The purpose of risk treatment plans is to document how the chosen treatment options will be implemented.

The unit should develop a risk treatment plan that includes:

- The reasons for selection of treatment options, including expected benefits to be gained;
- Those who are accountable for approving the plan and those responsible for implementing the plan;
- Proposed actions;
- Resource requirements including contingencies;
- Performance measures and constraints;
- Reporting and monitoring requirements; and
- Timing and schedule.

The unit should ensure treatment plans are integrated with the management processes of the organisation and documented as part of the quality manual and relevant operating procedures.

Monitoring and review

The unit should document risk monitoring and review protocols to allow for the re-assessment of identified risks and identification of newly occurring risks.

The unit's monitoring and review processes should encompass all aspects of the risk management process for the purposes of:

- Ensuring that controls are effective and efficient;
- Obtaining further information to improve risk assessment;
- Analysing and learning lessons from events (including near-misses), changes, trends, successes and failures;
- Detecting changes in the external and internal context, including changes to risk criteria and the risk itself which can require revision of risk treatments and priorities; and
- Identifying emerging risks.

The monitoring and review protocols should include:

- Frequency of re-assessment or assessment; and
- Reporting processes for the updating of risk treatments and risk thresholds.

Table 33: *Example Risk register*

Function/activity	GENERAL	Compiled by:	The Boss	Date:	DD MMM YYYY
Reviewed by:	The Boss's Boss	Date reviewed:	DD MMM YYYY	Date of next review:	DD MMM YYYY

Reference	The risk – what can happen and how	Likelihood (1 to 5)	Impact (1 to 5)	Risk Score (L x I)	Risk Treatment Strategies	Responsibility
Unique identifier allowing the reference to be linked to a more detailed report or risk treatment plan	The risk factor or risk event. What can happen and how it can happen.	Score	Score	LxI	Outline of treatments to minimise, mitigate or remove risk.	Person/s responsible for control and treatment.

Table 34: *Example* Priority risk table and risk treatment plan

Function/activity	GENERAL	Compiled by:	The Boss	Date:	DD MMM YYYY
Reviewed by:	The Boss's Boss	Date reviewed:	DD MMM YYYY	Date of next review:	DD MMM YYYY

Risk and impact	Priority	Action plan and activities	Responsibility	Timeframe	Proof of action

APPENDIX 4: Example of the method for forming Elements 3-8

Table 35: Example showing how various guidance, requirements and protocols are combined into normative standards for the Program Element 3

DAFF Guidance - Performance checklists	DAFF Guidance - Performance measures and targets	MLA/ LiveCorp Supply Chain Procedures and SOPs	The Program Normative Standards
<p>1.1. Movement of livestock is carried out calmly and effectively.</p> <p>1.2. Staff do not try to make animals move (by moving into the flight zone) if they have nowhere to go.</p> <p>1.3. If animals are already moving in the correct direction, they are never hit or have unnecessary pressure put on them.</p>	<p>Are staff observed to be working in accordance with SOPs for the relevant facility?</p> <p>Does this SOP incorporate low stress animal movement using natural behaviour?</p> <p>Observe management - what occurs when staff do not follow SOP - Is control exercised and correction made to prevent recurrence?</p> <p>Are animals slipping in races and on ramps? <i>[Target - less than 3%]</i></p> <p>Are animals falling during loading unloading and movement? <i>[Target - less than 1%]</i></p> <p>Are animals handled without being forced needlessly to 'crowd' in races, pens etc by deliberate human activity?</p> <p><i>[Target - animals are only forced against others to move towards an exit.]</i></p> <p>Are stock moving in the correct direction allowed to move without being hit or having pressure needlessly applied to them?</p> <p>Are supervisory staff applying corrective measures?</p>	<p>Supply Chain Procedures</p> <p>1.2.3 Ensure livestock are unloaded from the vessel and loaded onto trucks in a calm and efficient manner.</p> <p>1.2.4 Ensure staff do not try to make animals move (by moving into the flight zone) if they have nowhere to go.</p> <p>1.2.5 Ensure that if animals are already moving in the right direction, they are never hit or have pressure put on them.</p> <p>Standard Operating Procedures</p> <p>Work as a team to move and draft livestock—with all aware of their responsibilities.</p> <p>Learn about animal behaviour and use this knowledge to move cattle calmly and effectively.</p> <p>Always apply pressure in the correct position and, when the animal is moving in the right direction, release the pressure by moving out of the flight zone.</p> <p>Do not try to make animals move (by moving into the flight zone) if they have nowhere to go.</p> <p>Never hit or put pressure on an animal that is already moving in the right direction.</p>	<p>1. Standard operating procedures (SOP)</p> <p>1.1. The unit has a documented SOP for the handling of livestock relevant to its activities and that:</p> <ul style="list-style-type: none"> a) The SOP is clearly communicated to all staff who are required to understand relevant procedures; b) the unit regularly conducts training on SOPs; and c) the unit has documented procedures in place for identifying non-conformance with the SOPs or this element and methods for ensuring such non-conformance is rectified. <p>2. Loading practices</p> <p>2.1. Only competent stock handlers should move livestock.</p> <p>2.2. Movement of livestock should be undertaken:</p> <ul style="list-style-type: none"> a) In a calm and efficient manner; and b) in a manner in which the animals flight zone is considered <p>2.3. Handlers should not try to make the animals move if they have nowhere to go.</p> <p>2.4. Handlers should never hit or put pressure on an animal that is already moving in the right direction.</p> <p>3. Loading facilities</p> <p>3.1. Loading facilities must not have any faults or flaws that will cause injury to the animals or allow escape.</p> <p>3.2. Loading and unloading ramps must have:</p> <ul style="list-style-type: none"> a) Adequate non-slip flooring; and b) sides that are sufficiently high enough to prevent escape. <p>3.3. The angle of the discharge ramp will not cause livestock to fall or slip and should not exceed 30 degrees.</p>

APPENDIX 5: Conformance measures, sanctions and reporting

Conformance measures

The following conformance controls and measures be utilised for both self-assessments and third-party assessments.

Minor non-conformance

Minor non-conformances should be reported:

- As they are identified through the *Record of Conformance Issues and Actions* if detected in every day operations;
- Through the *Self-assessment* report; and
- Through the *On-site Audit Report* or the *Desktop Audit Report*.

Where a minor non-conformance is identified, the unit must remedy the non-conformance by undertaking relevant corrective action.

The unit should maintain records of the nature of corrective actions taken using the *Record of Conformance Issues and Actions* and provide such documentation during a self-assessment or on-site or desktop audit.

Failure by the unit to correct a non-conformance within the time frame specified by an auditor or assessor may result in a minor non-conformance elevated to a major non-conformance.

Major non-conformance

Major non-conformances should be reported:

- As they are identified through the *Record of Conformance Issues and Actions* if detected in every day operations;
- Through the *Self-assessment* report; and
- In the case of external audits, a *Corrective Action Request (CAR)*.

Where a *Corrective Action Request* is issued, the unit must remedy the non-conformance by undertaking one or more of the following:

1. Taking action to eliminate the detected non-conformance; and
2. Taking action to preclude its original intended use or application.

The unit should maintain records of the nature of corrective actions taken using the *Record of Conformance Issues and Actions* and provide this documentation during a self-assessment, desktop audit or on-site audit.

Failure by the unit to correct a non-conformance within the time frame specified by an auditor or assessor may result in the major non-conformance being elevated to a critical non-conformance.

Critical non-conformance

Critical non-conformances should be reported:

- As they are identified through the *Record of Conformance Issues and Actions* if detected in every day operations;
- Through the Self-assessment report; and
- In the case of external audits, in a *Critical Incident Report (CIR)*.

Where a *Critical Incident Report* is issued, the unit must remedy the non-conformance by undertaking relevant corrective action.

When a *Critical Incident Report* is issued, then the auditor, assessor, certifying body or the Program will consider the area of non-conformance and may do one or more of the following:

- Seek additional information;
- Uphold the *Critical Incident Report*;
- Close the *Critical Incident Report* and issue a *Corrective Action Request* and determine, in consultation with the unit, a course of action to ensure that the unit is operating in accordance with the Program standards or rules; or
- Suspend or revoke certification.

Recording of non-conformance and corrective actions

Records of the nature of non-conformance and any subsequent actions taken, including concessions obtained, shall be maintained using:

- In the case of identification by the unit during operations (not when a self-assessment is occurring), the *Record of Conformance Issues and Actions*;
- In the case of self-assessments, the *Self-assessment* form; and
- In the case of external audits, noted on the *On-site Audit Report or Desktop Audit Report*.

Such records of non-conformance should be completed when non-conformance is identified as part of the self-assessment, desktop audit, on-site audit or during the normal course of the unit's operation.

Reporting of non-conformances must be undertaken as outlined in Table 35.

Table 36: Reporting frequency for non-conformance

Detection method	Type of non-conformance		
	Minor	Major	Critical
Self-assessment	surveillance frequency	surveillance frequency	surveillance frequency
On-site audit	surveillance frequency	surveillance frequency	surveillance frequency
Desktop audit	surveillance frequency	surveillance frequency	surveillance frequency
Business operations	Not required	Within 28 days of identification	Within 15 days of identification

Status of certification

Each unit would be assigned a status by the Company. The status options are described as follows:

- **Registered**
The unit has applied for Certification but has yet to be Certified.
- **Certified**
The unit meets the Program requirements therefore the applicant is Certified.
- **Expired**
The unit has not followed appropriate requirements to maintain certification as required under the Program Rules.
- **Suspended**
Certification has been suspended from that unit due to an issue of non-conformance with the Program standards or rules. The applicant will be informed of the non-conformance and have 30-days to resolve the issue and provide evidence of conformance.
- **Revoked**
Certification has been revoked from that unit by the Company due to an issue of non-conformance with the Program standards or rules that has not been resolved within 30 days.
- **Withdrawn**
Certification has been withdrawn voluntarily.

Sanctions

If a unit has an Expired, Suspended, Revoked or Withdrawn status, the company may impose sanctions, including any or all of the following:

- Rescind the unit's status as Certified;
- Rescind the unit's status as an Approved User of the Marks;
- Requested that the unit immediately cease using the marks or appellations;
- Require the unit to, within reason, publish withdrawals of representations and or corrective statements in a manner and form directed by the company and, if the unit does not comply with the requirement within 14 days of receiving notice from the company, the company may publish the withdrawal and/or statements and cover the costs of doing so from the unit; and
- Change the status of the unit on the public *Register of Program Certified Units*.

Cessation of certification

Voluntary Withdrawal

- A unit may, through written notice to the company, request withdrawal of certification.
- Withdrawal is effective upon receipt by the company of the notice.
- Where a unit voluntarily withdraws from Certification, then the unit can reapply in writing for the reinstatement of Certification at any time.

Suspension or Revoking

The Program may suspend or revoke Certification from a unit if:

- The Company becomes aware of a situation which in its view compromises the integrity of the Program;
- The unit fails to permit reasonable access to an auditor or to co-operate with an auditor during any on-site audit or desktop audit;
- The unit fails to maintain conformance with the Program Standards and/or the Rules or fails to take specified corrective action;
- The unit fails to pay any fees associated with the Program;
- The unit supplies false information, claims or documentation;
- The company upholds a Critical Incident Report;

- The company considers that the unit is unable or unwilling to comply with the rules, the Program standards or any of the Program requirements;
- The company considers that matters have occurred, or are likely to occur, on a unit which may prejudice the reputation of the Program; or
- The unit fails to obtain ESCAS approval from DAFF.

As a result the Company may suspend Certification for the unit and issue a Show Cause Notice to the unit stating:

- The grounds on which the notice is given; and
- That the unit must give the company a written statement within 14 days of receipt of the notice showing cause why certification should not be suspended and that, if the unit fails to respond to the notice, its certification may be revoked.

The Company will:

- Consider any written submission made by the unit;
- Obtain and consider any other material that it may consider relevant; and
- Decide:
 - Not to take any further action by removing a suspension;
 - To revoke certification; or
 - To take such other steps with regards to certification as the company considers appropriate in the circumstances.

The company may adopt such procedures in deciding whether or not to suspend or revoke certification as it considers necessary. These procedures may vary from time to time as, in the opinion of the company, the circumstances require.

If certification for the unit is suspended or revoked, or the Program makes any other decision, the Program will notify the applicant in writing.

If certification for the unit is suspended or revoked, the unit status on the *Register of Certified Units* will be amended as applicable.

Where a unit's certification is suspended or revoked then the unit may not apply for recertification until 28 days after the date certification was revoked.

In assessing any such application for re-certification, the company will consider those matters that exist or are likely to exist which may prejudice the unit's continuing ability to meet the Program requirements or the reputation of the Program.

Right of appeal

Any refusal to grant certification or any suspension or revoking of any such certification or registration is subject to a right of appeal by the affected unit to the company.

If the dispute is not resolved within 14 days of submission of the dispute to the Program company or such other time as the company determines then either party may request the President of the Law Society or equivalent in their state or country, or his nominee, to appoint an expert to determine the dispute.

In making a determination:

- Each expert must be required to determine the dispute taking into account the Program rules and the standards;
- Each expert acts as an expert and not as an arbitrator; and
- The expert's decision is conclusive, final and binding on the parties (except in the case of manifest error).

The parties must pay the costs of the determination as determined by the expert.

APPENDIX 6: The Program's documents register

Document	Description	Who is responsible for using	Existing, Modify or Create	Existing Doc	Modifications required
Standard Operating Procedures for the Welfare of Livestock in Overseas Markets	To provide instructional direction for personnel handling livestock from disembarkation through to slaughter	All personnel handling animals	E	Standard operating procedures for the welfare of livestock in overseas markets	
Animal Welfare Officer Standard Operating Procedures	To provide instructions as to the nature of the Animal Welfare Officer's day-to-day activities and responsibilities	Animal Welfare Officer	M	Animal Welfare Officer Standard operating procedures	Review for completeness and consistency.
Traceability Standard Operating Procedures	To provide instructions for ensuring traceability is maintained within the unit or supply chain	Animal Welfare Officer	M	FORM 026	Review for completeness and consistency. Modify to ensure relevance to various traceability systems.
Reporting of Non-conformance Standard Operating Procedures	To provide instructions for identifying and reporting non-conformance with the Program - used in conjunction with records: Self-assessment, Record of Conformance Issues and Actions	Unit management	C		

APPENDIX 7: The Program's records register

Records	When it is to be used	What is to be recorded	Who is responsible for recording	Existing, Modify or Create	Existing Record	Modifications required
Ship Discharge and Trucking to Feedlot Report	As livestock are unloaded from ship and loaded onto trucks for transport to feedlot	Date, location, AWO details, shipment number/ID, stevedore company, trucking company, discharge start and end times, total number discharged, receipt of documentation, mortalities, NLIS tag handling for mortalities, discharge welfare issues, trucking welfare issues	Animal Welfare Officer	M	FORM 008	Expand this to include a checklist with critical control point items from DAFF Animal Welfare Performance Targets and Measurements, MLA/LiveCorp Supply Chain Procedures and MLA/LiveCorp SOPs. Introduce standardised, formal naming protocol.
Feedlot Unloading Report	As livestock are unloaded from trucks into the feedlot	Feedlot name, date, location, shipment number/ID, trucking company, unloading start and end times, total number unloaded, AWO details, receipt of documentation, mortalities, NLIS tag handling for mortalities, unloading welfare issues, trucking welfare issues	Animal Welfare Officer	M	FORM 009	Expand to include a checklist with critical control point items from DAFF Animal Welfare Performance Targets and Measurements, MLA/LiveCorp Supply Chain Procedures and MLA/LiveCorp SOPs. Introduce standardised, formal naming protocol.
Daily Feedlot Inspection Report	Daily to ensure animal welfare and the correct application of procedures	Feedlot name, date, location, AWO details, checklist items as related to animal welfare and procedures	Animal Welfare Officer	M	FORM 006 / Standard Compliance Model AWO Check List	Modify FORM 006 so it is consistent with Standard Compliance Model AWO Check List and allows for daily reporting in a weekly format so as to become a weekly summary report. Expand this to include a checklist with critical control point items from DAFF Animal Welfare Performance Targets and Measurements, MLA/LiveCorp Supply Chain Procedures and MLA/LiveCorp SOPs. Introduce standardised, formal naming protocol.

Records	When it is to be used	What is to be recorded	Who is responsible for recording	Existing, Modify or Create	Existing Record	Modifications required
Weekly Feedlot Inspection Summary	Weekly summary of findings from the Daily Feedlot Inspection Report	Feedlot name, date, location, AWO/Supply Chain Managers details, facility management compliance, procedure compliance, data recording compliance, non-conformance summary, rating of non-conformance, corrective actions required, date of review of corrective actions.	Animal Welfare Officer/Supply Chain Manager	C		Develop form that is consistent with Standard Compliance Model AWO Check List - Supply Chain Managers Checklist and Non-compliance Summary.
Feedlot Discharge and Trucking to Lairage/Abattoir Report	As livestock are unloaded from feedlot and loaded into trucks for transport to lairage/abattoir	Feedlot name, date, location, AWO details, trucking company, lairage/abattoir details, discharge start and end times, total number discharged, receipt of documentation, unloading and loading welfare issues, trucking welfare issues	Animal Welfare Officer	M	FORM 008	Modify FORM 006 to suit feedlot. Expand to include a checklist with critical control point items from DAFF Animal Welfare Performance Targets and Measurements, MLA/LiveCorp Supply Chain Procedures and MLA/LiveCorp SOPs. Introduce standardised, formal naming protocol.
Lairage Unloading Report	As livestock are unloaded from trucks into lairage	Lairage name, date, location, trucking company, unloading start and end times, total number unloaded, AWO details, receipt of documentation, mortalities, NLIS tag handling for mortalities, unloading welfare issues, trucking welfare issues	Animal Welfare Officer	M	FORM 009	Modify FORM 006 to suit lairage. Expand to include a checklist with critical control point items from DAFF Animal Welfare Performance Targets and Measurements, MLA/LiveCorp Supply Chain Procedures and MLA/LiveCorp SOPs. Introduce standardised, formal naming protocol.
Daily Lairage Inspection Report	Daily to ensure animal welfare, and the correct application of procedures while animals are in lairage	Lairage name, Date, Location, AWO details, Checklist items as related to animal welfare and procedures	Animal Welfare Officer	C		Based on Feedlot Daily Inspection Report. Ensure consistency with Standard Compliance Model AWO Check List and for daily reporting in a weekly format. Expand to include a checklist with critical control point items from DAFF Animal Welfare Performance Targets and Measurements, MLA/LiveCorp Supply Chain Procedures and MLA/LiveCorp SOPs. Introduce standardised, formal naming protocol.

Records	When it is to be used	What is to be recorded	Who is responsible for recording	Existing, Modify or Create	Existing Record	Modifications required
Daily Abattoir Inspection Report	Daily to ensure animal welfare and the correct application of procedures during slaughter with and without stunning	Abattoir name, date, location, AWO details, checklist items as related to animal welfare and procedures	Animal Welfare Officer	M	FORM 007 / Standard Compliance Model AWO Check List / ESCAS Abattoir Visit Report	Modify FORM 007 to be consistent with Standard Compliance Model AWO Check List and allow for daily reporting in a weekly format. Expand to include a checklist with critical control point items from DAFF Animal Welfare Performance Targets and Measurements, MLA/LiveCorp Supply Chain Procedures and MLA/LiveCorp SOPs. Introduce standardised, formal naming protocol.
Weekly Abattoir Report	Weekly summary of findings from the Daily Abattoir Report	Abattoir name, date, location, AWO/Supply Chain Manager's details, facility management compliance, procedure compliance, data recording compliance, non-conformance summary, rating of non-conformance, corrective actions required, date of review of corrective actions	Animal Welfare Officer	E	Standard Compliance Model AWO Check List - Supply Chain Managers Checklist and Non-compliance Summary.	Review to ensure checklist includes critical control point items from DAFF Animal Welfare Performance Targets and Measurements, MLA/LiveCorp Supply Chain Procedures and MLA/LiveCorp SOPs. Introduce standardised, formal naming protocol.
Tag Replacement Advice	When animal is identified as not having an NLIS device on arrival at feedlot or at any other time while at the feedlot	Date, shipment number, animal type, brand, other identification information, AWO details, visual tag number, pen ID, shipment number of pen mates, new NLIS device number affixed, scanning of replacement tag at crush	Animal Welfare Officer	M	FORM 011	Remove reference to protocol and allow field for new NLIS device number to be recorded. Re style as list to allow for ongoing collection of multiple replacement activities per sheet rather than one replacement per sheet. Introduce standardised, formal naming protocol.
Stunner Maintenance Log	To log the servicing and maintenance of stunning device	Abattoir name, date of service, signature of servicer, comments regarding any required repairs, issues or condition of stunner etc	Individual responsible for performing maintenance and repairs on stunning devices	E	FORM 024	Introduce standardised, formal naming protocol.

Records	When it is to be used	What is to be recorded	Who is responsible for recording	Existing, Modify or Create	Existing Record	Modifications required
Contingency Plan for Stunner Failure	To record stunning device details, contact details for service and repairs, procedures required in case of a failure in the stunning device	Abattoir name, stunning device used, supplier, location, phone number, local stunner service and parts technician, location, phone number, location of spare parts, operational procedures, operational instructions, related documentation	Abattoir management	E	FORM 025	Introduce standardised, formal naming protocol.
Form Register	To ensure record keeping forms and templates are controlled	Company name, person responsible for document control, form number, title of form date released, latest version, approved by	Unit management	E	FORM 028	Introduce standardised, formal naming protocol.
Contract Register	To ensure copies of contracts are kept	Company name, exporter name and corresponding contract, importer name and corresponding contract, abattoir name and corresponding contract, livestock buyer name and corresponding contract, stevedore name and corresponding contract, trucking contractor name and corresponding contract	Unit management	M	FORM 030	Include field for exporter. Introduce standardised, formal naming protocol.
Supply Chain Unit Register	To ensure a central point of contact information for all units in the supply chain	Company name, contact details for: exporter, importer, abattoir, livestock buyer, stevedore, trucking contractor	Unit management	C		
Stevedore Training Log	To keep a log of training provided to stevedores	Company name, date of training, training type, participants, trainer	Unit management	E	FORM 013	Introduce standardised, formal naming protocol.
Stevedore Training Certificate	To be provided to each participant after receiving training	Company name, relevant text, signature and of stevedore that received training and company representative, date signed	Unit management	E	FORM 014	Introduce standardised, formal naming protocol.

Records	When it is to be used	What is to be recorded	Who is responsible for recording	Existing, Modify or Create	Existing Record	Modifications required
Truck Driver Training Log	To keep a log of training provided to truck drivers	Company name, date of training, training type, participants, trainer	Unit management	E	FORM 016	Introduce standardised, formal naming protocol.
Truck Driver Training Certificate	To be provided to each participant after receiving training	Company name, relevant text, signature and of truck driver that received training and company representative, date signed.	Unit management	E	FORM 017	Introduce standardised, formal naming protocol.
Feedlot Animal Handler Training Log	To keep a log of training provided to animal handlers in the Feedlot	Company name, feedlot name, date of training, training type, participants, trainer	Unit management	E	FORM 019	Introduce standardised, formal naming protocol.
Feedlot Animal Handler Training Certificate	To be provided to each participant after receiving training	Company name, relevant text, signature and of feedlot animal handler that received training and company representative, date signed.	Unit management	E	FORM 020	Introduce standardised, formal naming protocol.
Abattoir Animal Handler Training Log	To keep a log of training provided to animal handlers in the Abattoir	Company name, abattoir name, date of training, training type, participants, trainer	Unit management	E	FORM 022	Introduce standardised, formal naming protocol.
Abattoir Animal Handler Training Certificate	To be provided to each participant after receiving training	Company name, relevant text, signature and of abattoir animal handler that received training and company representative, date signed.	Unit management	E	FORM 023	Introduce standardised, formal naming protocol.
Self-assessment	To be undertaken to meet self-assessment requirements of the Program	Relevant checklist information required to ensure conformance with the Program rules and standards	Unit individual responsible for QA	C		

Records	When it is to be used	What is to be recorded	Who is responsible for recording	Existing, Modify or Create	Existing Record	Modifications required
Record of Conformance Issues and Actions	To be completed if a non-conformance is discovered during day-to-day operations, self-assessments or during third-party audits	Unit name, date, location, summary of non-conformance summary, rating of non-conformance, corrective actions required, date of review of corrective actions.	Any individual responsible for critical control points and ensure compliance	C		
Risk Register	To be used by a unit to identify, analyse and prioritise areas of risk	Function/activity, compiled by, date compiled, reviewed by, date reviewed, date of next review, reference, risk items, likelihood, impact, risk score, treatment priority, risk treatment strategies, responsibility	Unit individual responsible for QA	C		Example provided in Final Report
Risk Treatment Plan	To be used by a unit to document actions to be undertaken for risks identified as priority	Function/activity, compiled by, date compiled, reviewed by, date reviewed, date of next review, risk and impact, priority of risk, action plan and activities, responsibility, timeframe, proof of action	Unit individual responsible for QA	C		Example provided in Final Report
Audit Checklist	Checklist that auditors will use during third-party desktop and on-site audits	Relevant checklist information required to ensure conformance with the Program rules and standards	Auditors	C		
Surveillance Frequency Risk Evaluation	List of risk events that act as indicators as to the overall riskiness of that unit, scores for each. For auditors to use to determine surveillance frequency	Identified risk events that directly indicate overall riskiness of unit, relevant points for each risk event, column for total and relevant calculations	Auditors	C		Example provided in Final Report

Records	When it is to be used	What is to be recorded	Who is responsible for recording	Existing, Modify or Create	Existing Record	Modifications required
On-site Audit Report	Report that Auditors complete summarising their findings based on the on-site audit, surveillance frequency risk evaluation and their opinion on certification	Scope/overview of audit, Findings, Audit opinion, Auditor name, signature, certifying body	Auditor	C		
Desktop Audit Report	Report that Auditors complete summarising their findings based on the desktop audit, surveillance frequency risk evaluation and their opinion on certification	Scope/overview of audit, Findings, Audit opinion, Auditor name, signature, certifying body	Auditor	C		
Corrective Action Request	Issued when a major non-conformance has been identified during an on-site or desktop audit	Unit name, Compiled by, Date compiled, Date major non-conformance identified, Description of non-conformance, Proposed corrective action, Proposed close out date, Close out details, Date downgraded (multiple fields) and auditor downgrading	Issued by Certifying Body	C		
Critical Incident Report	Issued when a critical non-conformance has been identified during an on-site or desktop audit	Unit name, Compiled by, Date compiled, Date critical non-conformance identified, Description of non-conformance, Proposed corrective action, Proposed close out date, Close out details, Date downgraded (multiple fields) and auditor downgrading	Issued by Certifying Body	C		

Records	When it is to be used	What is to be recorded	Who is responsible for recording	Existing, Modify or Create	Existing Record	Modifications required
Application to Become a Certifying Body	To be used by certification bodies that wish to audit and certify units under the Program	Relevant application data required based on the Program Rules	Certifying Body seeking approval	C		
Program Application Form	To be completed by units wishing to secure certification in the Program	Relevant application data required based on the Program Rules	Units seeking certification or registration	C		
Addition of Unit Form	To be completed by supply chains wishing to add a certified unit to its chain	Relevant application data required based on the Program Rules	Supply chain wanting to add a certified unit	C		
Register of Certified Units	To provide a list of units and their status within the Program	Relevant identification information of the unit and its status, as determined by the Program Rules	The Company	C		



addendum report

Project code: W.LIV.3014
Prepared by: Peter Schuster
Schuster Consulting Group
Date published: February 2014

PUBLISHED BY
Meat & Livestock Australia Limited
Locked Bag 991
NORTH SYDNEY NSW 2059

Addendum to Final Report: **Exporter Supply Chain Assurance System - Development of a risk management and quality assurance program**

Meat & Livestock Australia acknowledges the matching funds provided by the Australian Government to support the research and development detailed in this publication.

This publication is published by Meat & Livestock Australia Limited ABN 39 081 678 364 (MLA). Care is taken to ensure the accuracy of the information contained in this publication. However MLA cannot accept responsibility for the accuracy or completeness of the information or opinions contained in the publication. You should make your own enquiries before making decisions concerning your interests. Reproduction in whole or in part of this publication is prohibited without prior written consent of MLA.

Contents

1.	Background.....	3
1.1.	Project objective	3
2.	Approach	3
3.	Methodology	4
4.	Findings.....	5
4.1.	Importer considerations	5
4.2.	Node-based as opposed to supply chain-based program.....	5
4.3.	Non-conformances and non-compliances	6
4.4.	Drivers (or barriers) and motivation.....	6
4.5.	Consultation and implementation planning.....	7
4.6.	Program ownership and service provision.....	7
4.7.	Technology	7
5.	Summary and conclusions	9
5.1.	Critical success factors	9
6.	Recommendations.....	10
APPENDIX 1: Questions to exporters		12
APPENDIX 2: Discussion notes		13

1. Background

The Australian Government has introduced a new regulatory framework for the live export trade that covers the entire supply chain in overseas market places from the point of disembarkation to the point of slaughter. The Exporter Supply Chain Assurance System (ESCAS) places the responsibility on Australian exporters to maintain control and ensure measurable animal welfare outcomes in-market.

In early 2013 Meat & Livestock Australia (MLA) and LiveCorp contracted project V.LIV.3014 which investigated the possible development of a quality assurance (QA) and risk management program to underpin ESCAS.

The *Final Report: Exporter Supply Chain Assurance System - Development of a risk management and quality assurance program* compiled by Schuster Consulting Group (SCG), laid out 26 recommendations and considerations for the development of such a program. In May 2013, MLA and LiveCorp undertook to consult with members of the live export industry regarding the recommendations stemming from W.LIV.3014 and the potential implications of introducing a QA program.

1.1. Project objective

The objective of the project was to consult with members of the live export industry to explain the recommendations stemming from W.LIV.3014 and seek feedback on issues that may affect the implementation of the recommendations.

Based on this consultation, a report (addendum to the final report for W.LIV.3014) was to be prepared outlining the feedback from industry in relation to implementation of the recommendations in W.LIV.3014.

2. Approach

Detailed discussions were conducted with 12 members of Australia's livestock export industry. Telephone conversations were also conducted with other industry participants and experts. The purpose of the discussions was to explain the recommendations of W.LIV.3014 and seek feedback on issues that may affect the implementation of the recommendations. Through these discussions, the potential implications of implementation were identified and the critical success factors identified in W.LIV.3014 further explored.

Discussions were also held with the consultants undertaking an industry review of the Australian Standards for the Export of Livestock (ASEL) to ensure consistency in the approach to standards pre and post disembarkation and identify issues discovered through their research that may affect the implementation of the recommendations of W.LIV.3014.

3. Methodology

Face-to-face meetings were sought and gained with those livestock export industry participants initially consulted in the development of W.LIV.3014. These individuals were originally identified through a consultative process with MLA and LiveCorp and were considered to represent all relevant species of animal (sheep and goats, cattle and buffalo) and account for the majority of livestock within each species category exported from Australia at the time of the research.

The W.LIV.3014 report was emailed to the live export industry participants in advance of the meetings along with a document summarising the recommendations and a series of general questions to guide the information gathering process during the face-to-face meetings (Appendix 1).

The SCG primary researcher, Peter Schuster, was accompanied during the face-to-face meetings by Peter Dundon, Manager Livestock Exports, MLA and Sam Brown, Chief Executive Officer, LiveCorp - Australian Livestock Export Corporation Limited, as per availability, such that implications of the recommendations beyond the immediate scope of the addendum report and peripheral issues may be considered and addressed.

This addendum report was prepared based on the findings of the consultation. The findings and recommendations reported within are presented in a socialised manner so as to protect the commercial in confidence nature of the open and frank discussions held with the livestock industry participants.

4. Findings

There was, without exception, qualified support for the primary recommendation of W.LIV.3014: That a QA program complemented by a risk assessment component (Program) be developed to support the live export industry in aspiring to best practice and achieving ESCAS compliance.

The most commonly expressed qualification was that significant concessions must be delivered by the Australian Government through the ESCAS regulatory framework in appreciation of the investment in time and resources that the implementation of QA would require. Without such concessions, investment in a Program should not proceed.

4.1. Importer considerations

The probable impact of a QA program on importers and in-market supply chain participants will be minimal assuming the requirements for conformance with the QA program are similar to the requirements under ESCAS. The attitude to such a Program will, however, vary and range from enthusiastic acceptance to rejection; influenced by the following considerations:

- **Consultation** – If industry decides to proceed with the development of a Program, an importer engagement strategy must be developed and implemented without delay. This should be a facilitated consultative process between exporters and importers with industry assistance. A government to government component is likely to be required. Feedback from importers and the markets should be considered in the implementation of the Program.
- **ESCAS** – Any additional imposition over and above that required through ESCAS which is not mitigated by significant concessions is likely to be met with resistance.
- **Sovereignty** – If the Program can be developed to be independent (of the Australian Government in principle and in practice) and international in its administration and application, it may be more widely accepted than is the case at present with ESCAS.
- **Appellation** – Recognition of Program participation through appellation would drive participation in many markets provided the cost of the program is equal or less than that associated with meeting ESCAS requirements.

4.2. Node-based as opposed to supply chain-based program

A node based system of operation was, without exception, preferred by those industry participants consulted in the preparation of this report and a number of important considerations were identified:

- **Drivers** – A node-based system would allow in-market drivers to be better leveraged.
- **Sovereignty** – A node-based system would mitigate the perception of foreign government interference.
- **Scaleable** – A node-based system would allow the program to potentially extend to address other in-market issues.

- **Literacy** – The degree of literacy and numeracy at a node level within ESCAS approved supply chains is inconsistent and often limited. This would need to be considered during the design of a QA program.

The nodes currently operating under ESCAS were considered to be capable of operating under a Program. The recommendation under W.LIV.3014 that supply chains be able to seek certification on behalf of poorly resourced nodes was considered to be appropriate and important in minimising the disruption that may be associated with the introduction of the Program.

4.3. Non-conformances and non-compliances

Treatment of non-conformances (breaches of the program standard) and the relationship between non-conformances and non-compliances (breaches of regulation ie: ESCAS) would be important, including the management of alleged non-conformances identified by animal activists. Were a Program to be introduced, the consensus was that non-conformances should be dealt with within the Program and reported, together with corrections, on the central management system. Non-conformances should not therefore constitute non-compliances; instead, ongoing certification, indicating that non-conformances have been addressed to the satisfaction of the auditor and certifying authority, should satisfy the Australian Government of ESCAS compliance.

The Program should include a provision where by non-conformances may be appealed.

The case-by-case treatment of non-compliances under ESCAS is considered by exporters to be subjective and is creating confusion. This confusion extended to how instances of force majeure (eg: where livestock may be taken at gun point) are treated and the lack of certainty regarding the cumulative effect of compliance breaches.

4.4. Drivers (or barriers) and motivation

The introduction of a Program was seen as a potential mechanism for improving access to markets which have resisted the requirements of ESCAS, primarily due to the perception of Australian Government interference in sovereign affairs. This was identified as potentially being a major driver for exporter participation in the Program.

The cost to both industry and the Australian Government of administering ESCAS is significant and the opportunity exists to reduce this cost through the introduction of a Program.

The implementation of the Program recommended through W.LIV.3014 was considered to be a logical and appropriate way to address the issue of auditor competence. The delivery of a consistent and capable audit process was identified as being critical to the success of the Program.

Concern was raised regarding the risk of investing in the development of a Program which would then operate in parallel to ESCAS, resulting in duplication and increased cost. It was, however, accepted that a period of parallel operation would be required during an introductory phase provided there was a distinct point of convergence.

The potential of the Program to minimise duplication and administration was considered to be a significant potential benefit.

4.5. Consultation and implementation planning

Along with importer consultation as identified in 4.1, were a Program to be introduced, a transition or implementation plan should be developed in consultation with stakeholders. This should include:

- The agreed approach to non-conformances and a phase in period for penalties.
- The application of the Program in mature markets operating according to ESCAS and new markets (it was identified that a different approach would be required for each).
- The possible extension of the Program to breeder livestock.

Business to business and government to government discussions will need to be considered in implementation (while emphasising the independence of the Program). Government to government discussions will need to be diplomatic and mindful of the implications of the introduction of the Program for different government portfolios within importing countries.

4.6. Program ownership and service provision

An international steering committee, possibly comprising an animal welfare expert as well as industry participants (such as a figure head from the Middle East and South Asia), was considered to be desirable if affordable.

Industry was not considered to be an appropriate owner or administrator of the Program as this may be seen to compromise the integrity and independence of the Program.

The Food and Agriculture Organization of the United Nations (FAO) was suggested as a potential partner, program owner or sponsor.

4.7. Technology

All available technologies and data management solutions should be considered in the development and implementation of the Program, including the central management system.

Very clear boundaries would have to be defined to guide the development and use of the central management system. This should be limited to gaining assurance that animal welfare is being delivered. Traceability should not be managed through the central management system as customised and often complex commercial systems have been introduced within supply chains to provide assurance according to the requirements of ESCAS in this regard.

The central management system should include:

- Approved facilities and facilities no longer approved
- Audit scheduling
- Results of audit

- Allow stakeholders to access and interrogate
- Records of training etc
- Facilitate transition from paper based system
- When was the node last visited?
- What were the issues?
- What were the corrective actions?
- Were these dealt with satisfactorily?

4.8. Other considerations

The provision for parallel supply chains (certified under the Program and non-certified) to operate under the Program was considered to be important. This describes the situation where, for example, an abattoir may on one night process Australian cattle according to Program requirements and on the following night process local cattle for which certification is not required and different methods employed. This reflects the current situation under ESCAS.

Industry should consider whether there would be merit in seeking the Australian Government's support for extending Trade Memorandums of Understanding (MOUs) with importing countries to include reference to the Program.

Competent supply chain managers and Animal Welfare Officers (AWOs) were acknowledged as potentially being critical to the success of a Program.

The Program recommended through W.LIV.3014 was considered to be a logical and appropriate way to address the issue of auditor competence as auditors would be required to undertake training and demonstrate a degree of subject matter expertise, verified through competency testing, under the Program Standard. The certification process would also require auditors to present a case for the certification of a node to the certifying body. Through this process, their performance as an auditor would be further scrutinised.

Confusion and mistrust remains regarding self reporting within ESCAS. The Program was seen as a way to encourage self reporting, provided the management of this process remained within the Program.

5. Summary and conclusions

5.1. Critical success factors

The following have been identified as critical to the success of the Program:

- Significant concessions must be delivered through the ESCAS regulatory framework in appreciation of the investment in time and resources that the implementation of QA would require. Without such concessions, investment in a Program should not proceed.
- The cost of implementing and operating the Program must be a primary consideration and should not exceed the cost to exporters associated with achieving ESCAS compliance nor place a significant additional cost without commensurate benefit upon other supply chain participants.
- The Program standards must be developed in consideration that the Program may be implemented in Australia as well as in Australia's live export markets, to deliver a whole-of-chain outcome. This will have implications for the standardisation of OIE guidelines.
- The design and function of any central management system or database must protect the privacy and commercial interests of Program participants.
- The Program must be independent of both government and industry and be governed by a standards committee which reflects this independence.
- The Program should not be so prescriptive so as to necessarily require the use of standardised templates for reporting or the adoption of universal standard operating procedures to demonstrate conformance. Program participants should be able to apply their own systems and procedures provided they gain the confidence of the auditor that the program standards are being met.
- ESCAS penalties and sanctions would require review were the implementation of a Program to be agreed.
- Markets should be engaged early in the development phase and invited to contribute to the process.
- Government must have high level confidence in the certification process.
- For the Program to reach its full potential, it must be node-based rather than supply chain-based.
- The delivery of a consistent and capable audit process was identified as being critical to the success of the Program.

6. Recommendations

In addition to the critical success factors identified in 5.1, the following recommendations are made. These complement those made through W.LIV.3014:

- That the requirements under ESCAS form the normative standards for the Program such that conformance with the Program will mean compliance with ESCAS.
- That the addition of an aspirational standard also be considered to encourage continual improvement.
- The Program should aspire to replace ESCAS in its current form and not operate in parallel to ESCAS indefinitely. This should be agreed by the Australian Government and the design of the Program should be such that it offers the assurances which the Australian Government is currently seeking through ESCAS.
- That consideration be given to the incorporation of unannounced audits in the Program.
- The cost of implementing the Program will be significant and as one of the primary beneficiaries of the Program, the Australian Government should be approached to contribute to the establishment costs.
- Non-conformances should be dealt with within the Program and reported, together with corrections, on the central management system. Non-conformances should not therefore constitute non-compliances; instead, ongoing certification, indicating that non-conformances have been addressed to the satisfaction of the auditor and certifying authority, should satisfy the Government of ESCAS compliance. The Program should include a provision whereby non-conformances may be appealed to the certifier.
- The Food and Agriculture Organization of the United Nations (FAO) was proposed as an organisation that may be involved with the Program. While a precedent does not exist for their involvement with such a program, this should be investigated early in the Program's development to identify commonalities and opportunities for collaboration. These investigations should extend to other international organisations such as the World Organisation for Animal Health (OIE).
- The design and administration of the Program should encourage self-reporting without prejudice.
- Risk assessment should be considered as an intrinsic part of the Program and not discussed in isolation as was required by the Terms of Reference which delivered W.LIV.3014.

- The cost of complying with ESCAS has placed Australia at a comparative disadvantage to international competitors who do not have to comply with ESCAS. This Program should be implemented to allow for and encourage international participation and presents a significant opportunity for improving global animal welfare standards and should be promoted as such.

APPENDIX 1: Questions to exporters

General questions

- What do you see as being the probable impact on importers of the introduction of a QA program?
- How would a node-based QA program operate within your supply chain ie each node (port, transport, feedlot, abattoir) would be encouraged to seek individual certification?
- What is the capacity of nodes to implement QA?
- How could a QA program be leveraged to add value to your business? For example, how could this facilitate access to markets which have been historically difficult to access or to which access has been compromised post ESCAS?
- What are your major areas of concern with respect to ESCAS compliance and what is required to address these areas? Could QA play a role?
- What are your IMPORTER'S major areas of concern with respect to ESCAS compliance and what is required to address these areas? Could QA play a role?
- Are you aware of any in market issues that may drive or hinder the implementation or adoption of a QA program as proposed?
- What would your attitude be toward exporters playing a role in directing the company which owns the program?
- What would motivate your participation in such a program:
 - greater assurance that your supply chain is ESCAS compliant
 - the realisation of greater efficiencies through the standardisation of systems
 - the expectation of concessions by Government ie reduced audit frequency
 - the expectation of deregulation

Use of an administrative system

- How could a central reporting facility/database be constructed to add value to your operation?
 - Could such a system assist with ESCAS compliance through, for example:
 - Maintaining traceability systems and records;
 - Satisfying time critical reporting obligations through automated alerts;
 - Providing an operating platform through which ESCAS consignments may be managed and monitored;
 - Ensuring regular and comprehensive animal handler training?
 - What would be the key challenges in introducing such a system (technology, literacy, culture)?
-

APPENDIX 2: Discussion notes

Implications of recommendations – key points:

- ESCAS forms normative standards for the QA program – conformance with program will mean compliance with ESCAS remembering, however, that ESCAS is based on OIE therefore, conformance with program will mean adherence to OIE (potentially much broader international application of QA program beyond live export)
- Requirements of the proposed QA program over and above ESCAS are primarily reporting obligations to establish history of conformance (history of compliance with ESCAS). While under ESCAS exporters are already required to demonstrate ongoing compliance, QA will provide a formalised structure through which to do so
- The program will require that an entity seeking QA certification satisfy a third party auditor that systems are in place to assure conformance. While the standards of the QA program will provide guidance regarding what may deliver such assurance, the recommendation is that the program not be overly prescriptive and retain the flexibility to accommodate existing supply chain initiatives into a broader quality management system
- Unofficial objective of QA program – to demonstrate that issues of non-compliance with ESCAS are anomalies and not evidence of systemic failure by establishing a history of conformance via reporting
- QA will be the overarching program drawing together existing resources developed to facilitate ESCAS compliance including:
 - MLA/LiveCorp SOPs and company SOPs
 - Animal handler training
 - Reporting templates
 - Risk assessment
 - AWOs