final report

eMTC business and technical development

Abstract

Over the last 10 years numerous demonstration projects and commercial trials have been undertaken to develop and provide the value to industry of the use of globally recognized commercially applied information standards.

Global information standards refer to numbering, bar coding and electronic messaging (eMessaging) standards for specific red meat supply chain activities. Red meat industry guidelines have been developed by our industry from the global standards for trade and commerce. GS1 Australia manages these global standards.

The use of global standards for numbering, bar coding and eMessaging offers benefits to all parties in the red meat industry supply chain

Much of the coordination and development of the standards for product numbering and bar coding for the red meat industry has now occurred. As the focus in these areas has moved from the development, demonstration and adoption of these standards to the maintenance and training of standards it is timely to review the role of the RMSCC committee.

In 2003 MLA commenced an industry funded project in collaboration with AQIS to develop the standards to support an electronic version of the MTC. The eMTC system applies global information standards to uniquely track and trace individual cartons of meat back to the country of origin and their production source. The eMTC system is built on the GS1 global trading standards for unique product identification (GS1 bar code) and electronic messaging (EANCOM Despatch advice Message).

This project involves the applying and delivering technical expertise for the electronic exchange of regulatory data between companies and AQIS.

A Meat Transfer Certificate (MTC) is an AQIS paper form that is required to be completed when export product is moved from one export listed establishment to another export listed establishment. The purpose of the MTC is to clearly identify export eligible product and to maintain the export eligibility of the product. The current system is very manual and there are the following issues:

- Data entry errors
- Relatively high allocation of resources
- Tedious audit process

Executive Summary

Information standards
Global information standards refer to numbering, bar coding and electronic messaging (eMessaging) standards for specific red meat supply chain activities. Red meat industry guidelines have been developed by our industry from the global standards for trade and commerce. GS1 Australia manages these global standards.

Benefits
The use of global standards for numbering, bar coding and eMessaging offers benefits to all parties in the red meat industry supply chain, including:

For all trading partners:

- The ability to identify goods and shipments quickly and accurately.
- Track forward and trace back of products.
- Faster delivery of goods.
- Fewer handling and shipping errors.
- Better inventory management and reduced inventory holdings.
- Reduction of order and replenishment times.

For processing: (including slaughter, boning, cold store, value adding, retail ready, by-product/ co-products).

- The ability to identify carcases, cartons, bulk packs, pallets and shipments quickly and accurately.
- Compliance with customer (retail or export) requirements for bar coding.
- Track forward and trace back from slaughter to retail shelf.
- Integration with the National Livestock Identification Scheme (NLIS).
- eMessaging ability for the NVD Waybill and Meat Transfer Certificates.

For livestock production: (including breeding, backgrounding and finishing).

- The ability to identify livestock (mobs and individuals) and consignments quickly and accurately (NLIS).
- Electronic NVD and Waybill (e-DEC) and other regulatory and market access forms.
- Producer feedback matched to properties, mob and even individual animals.

Explanation of standards
As shown in the image below, there are three distinct components to information standards within the supply chain:
- **Identification:** Standard numbering which can be applied to individual animals, cattle consignments, carcase, carton and pallet labels, meat consignments.
- **Data carriers**: Represent the identification numbers in machine readable format, for example: Bar codes, Radio Frequency Identification Devices (RFID), pallet labels, carton labels and carcase tickets.

- **eMessaging:** Standards to transmit the captured data between trading parties and electronic National Vendor Declaration and Waybill (e-DEC) electronic Meat Transfer Certificates (eMTCs).

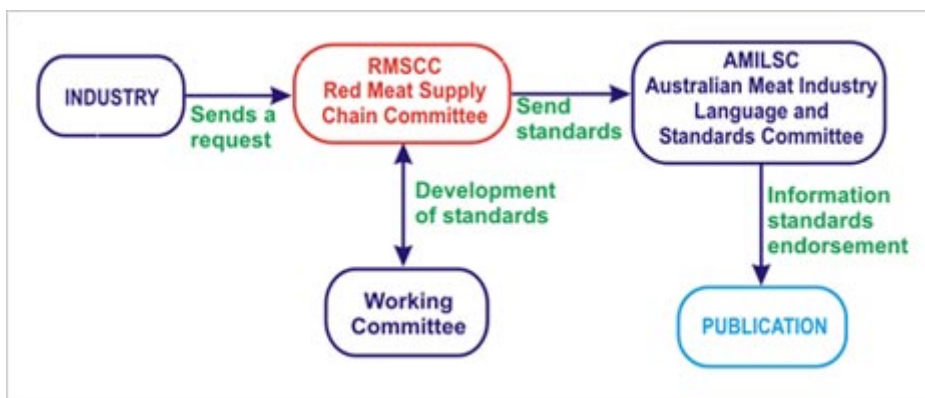## Development of standards

A committee of industry representatives was formed in 2004 to oversee the development and application of information standards to the red meat industry.
The role of the Red Meat Supply Chain Committee (RMSCC) is to provide co-ordination and direction for the development and adoption of the supply chain information standards and guidelines.

The activities of the RMSCC are complementary to the systems standards, products and guidelines developed through AUS-MEAT and focuses on identification and information technologies and systems from livestock production through to domestic retailers and international markets.
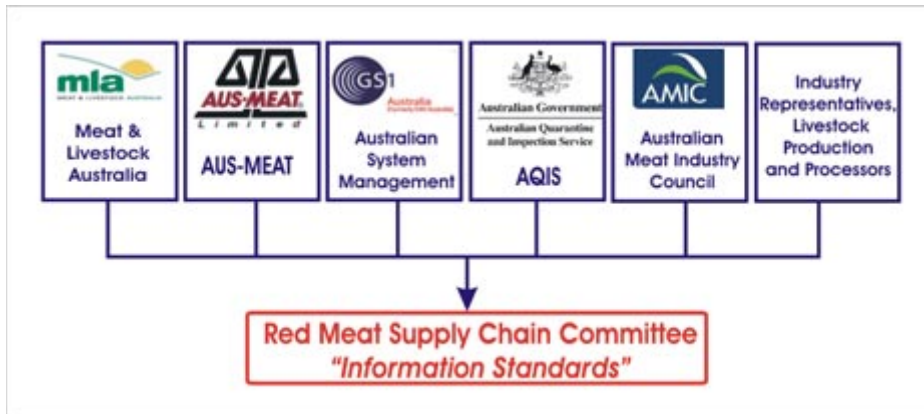
Industry sends a request to RMSCC who, together with a working committee, develop the information standards. These standards are then provided to the Australian Meat Industry Language and Standards Committee (AMILSC) for endorsement and publication.
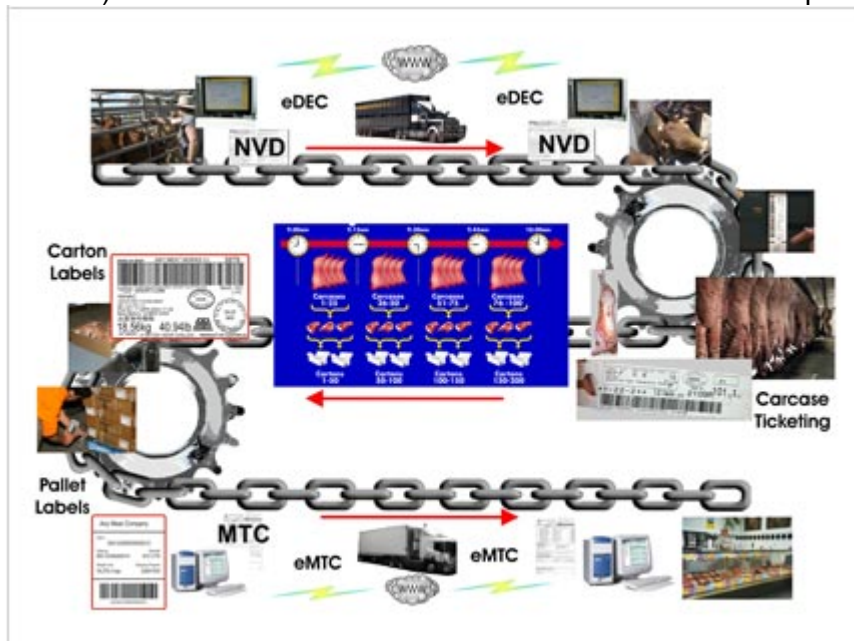
RMSSC Membership and structure

The RMSSC is made up of industry representatives including:
- AUS-MEAT
- Australian Meat Industry Council
- Meat and Livestock Australia
- GS1 Australia
- Australian Quarantine Inspection Services
- Processors
- Producers
- Technicians

Application of standards

The diagram below shows the red meat supply chain for non-retail trade product (carcases and cartons) and the information standards that have been developed for these activities.

These standards include:
- Electronic messaging for cattle and sheep National Vendor Declaration and Waybill (e-DEC)
- Numbering and bar coding for carcase tickets
- Numbering and bar coding for carton labels for carton and bulk non-retail red meat products
- Numbering and bar coding for pallet labels for non-retail red meat products
- Electronic messaging for Meat Transfer Certificates

The following deliverables were planned for the area of Information Standards in 2010/11:

- Continued migration of maintenance of approved standards to AUS-MEAT
- Building in GS1 bar coding and product numbering standards in existing red meat industry MINTRAC training packages
- Finalisation and release of the Guide to Information Standards CD
- Red Meat Supply Chain Committee (RMSCC) to continue to meet regularly to provide direction and to review emerging information system standards/ technology that may be applicable to the red meat industry, and coordination of development and industry adoption of information standards
- RMSCC to provide regular updates to the Australian Meat Industry Language and Standards Committee (AMILSC)
- Include meat industry bar coding and product numbering standards in existing red meat industry MINTRAC training packages.
- Finalisation and industry endorsement of the electronic Meat Transfer Certificate (eMTC)
- Commence adoption and roll out of the eMTC

The tasks to achieve the above deliverables have been undertaken throughout the year. A number of external impediments have been encountered and strategies implemented where possible to circumvent the impediments. The major impediments have included:

- Delay in transfer to AUS-MEAT of the maintenance of the standards and subsequent web links to allow finalisation of the Guide to Information Standards CD.
- Delay in the issuing of the Meat Notice by AQIS for the eMTC. This is necessary to ensure uptake demand by industry.
- Delay is approval for the eMTC plant/ system vendor project internally in MLA.
- Delay in funding approval for updating MINTRAC training packages to include meat industry bar coding and product numbering standards.