



# Final report

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## Teys Australia Collaborative Innovation Strategies Partnership Program Stage 4

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## Abstract

This project follows on from P.PIP.5011: Teys Australia Collaborative Innovation Strategies Partnership (CISP) Program Stage 3. Its focus is to further mature Teys' approach to innovation and capability building within its organisation and more broadly within its value chains which serves its customers and Australian cattle producers. This will underpin Teys ten-year strategy which includes:

- An evolution not a revolution (innovative)
- Integrating value chains 'end to end' to connect from producers right through to consumers (inclusive)
- Further develop data capture and analysis systems to better understand and rapidly adapt to evolving market dynamics (agile)
- Leverages our unique position as a 'platform' positioned between producer ecosystem and global channels to market (enabling)

Stage 4 was designed to help Teys continue its evolution from a producer of a commodity to a producer of premium protein and premium protein products. Equally CISP activities will focus on a similar evolution of value chains which is fundamental to Teys being able to meet the demand on its collaborative customers. The discipline provided by the overarching CISP will also provide the discipline to ensure that Teys delivers on its Strategic programs of innovation.

The emergence of Covid 19 with the consequential movement restrictions made effective execution of the CISP virtually impossible.

This final report specifically covers considerations and developments up to and including Milestone 2 including automation, robotics, sensory technologies, digital information and electronic traceability.

The report also provides updates into the other strategic project areas.

## Executive summary

### Background

In September 2007 Meat & Livestock Australia (MLA) launched the Collaborative Innovation Strategies Program (CISP). The aim of this program is to facilitate the development of broad innovation capabilities throughout the whole supply chain leading to an accelerated adoption of research and development (R&D) outcomes, a more strategic focus on innovation initiatives, and greater impact derived from investment in innovation by companies. The program involves the co-development of comprehensive innovation strategies with individual enterprises, which meet commercial imperatives in addition to focusing on the implementation of key industry and government innovation priorities.

Tey Australia have previously completed Stage 1, 2, and 3 of a Collaborative Innovation Strategies Partnership (CISP) with MLA. The CISP has been hugely successful for Teys Australia and MLA and has resulted in benefits for both entities, as well as the industry more broadly, as outlined in this report and individually published project reports over the last 6 years. Stage 3 of the CISP ran from October 2015- October 2018. 25 projects were co-funded under stage 3 of the CISP with a combined budget of \$7,658,712. The overall success is demonstrated by the comprehensive range of projects completed and the contribution of innovation insights provided to MLA, and to the industry.

Projects initiated under this stage of the CISP are strategic projects aimed to drive customer expectation through the supply chain with incentives. This has significant implications for Teys Australia and the entire beef supply chain through research into new technologies whilst building capability for all. Identifying and developing relationships with tertiary institutions and researchers both here and overseas as a means of building capability amongst our next generation of leaders has become a particular focus area for the business.

The focus of 'NextGen Production System' allows us to connect end-to-end value chains. Therefore, innovation activities will continue to "move out of the factory" and will increasingly involve Australian cattle producers and our customers. The key goal is to evolve systems and processes to truly connect cattle producers to our customers.

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## 1. Background

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Projects initiated under this stage of the CISP are strategic projects aimed to drive customer expectation through the supply chain with incentives. This has significant implications for Teys Australia and the entire beef supply chain through research into new technologies whilst building capability for all. Identifying and developing relationships with tertiary institutions and researchers, both here and overseas, as a means of building capability amongst our next generation of leaders has become a particular focus area for the business.

The focus of 'NextGen Production System' allows us to connect end-to-end value chains. Therefore, innovation activities will continue to "move out of the factory" and will increasingly involve Australian cattle producers and our customers. The key goal is to evolve systems and processes to truly connect cattle producers to our customers.

## 2. Objectives

Stage 4 of the CISP has the objective to help Teys develop internal capabilities, which facilitate the achievement of strategic programs, where there are already projects in train or in the pipeline that should be delivered over a three-year period focusing on:

- Process efficiencies through automation, developing capability and systems,
- Data/information analytics, developing capability to understand all the inputs and support development of predictive analytics, AI and machine learning capabilities.

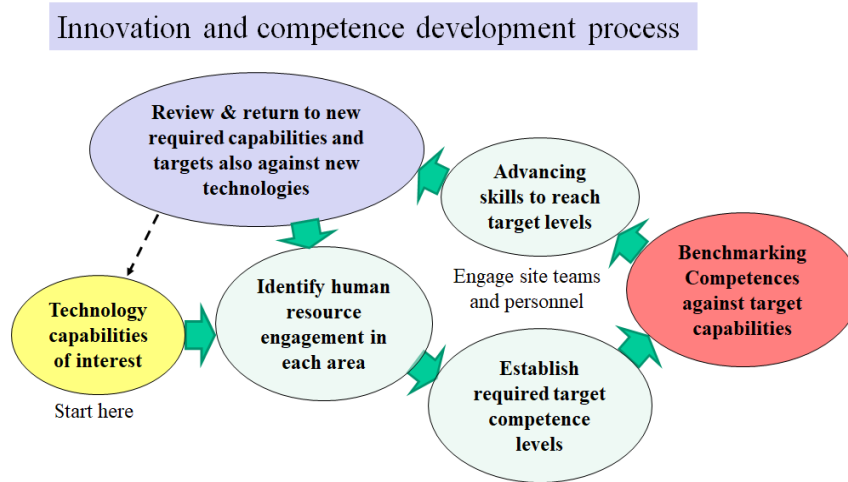
## 3. Methodology

Stage 4 focusses on increasing value through the supply chain, strategic initiatives and project execution. Projects were initiated when project ideas aligned with Teys Australia's innovation strategy and in turn the business strategy. Projects were also only initiated if they addressed a business need and/or provided a solution to a current challenge. Project areas included process automation, building collaborative supply chain relationships, capability development, learning from data and new product development processes.

As part of the capability building capacity provided by the CISP Teys engaged an automation expert to work with its on-plant staff at Rockhampton to improve their understanding of the process

**Capability building - Teys specific work**

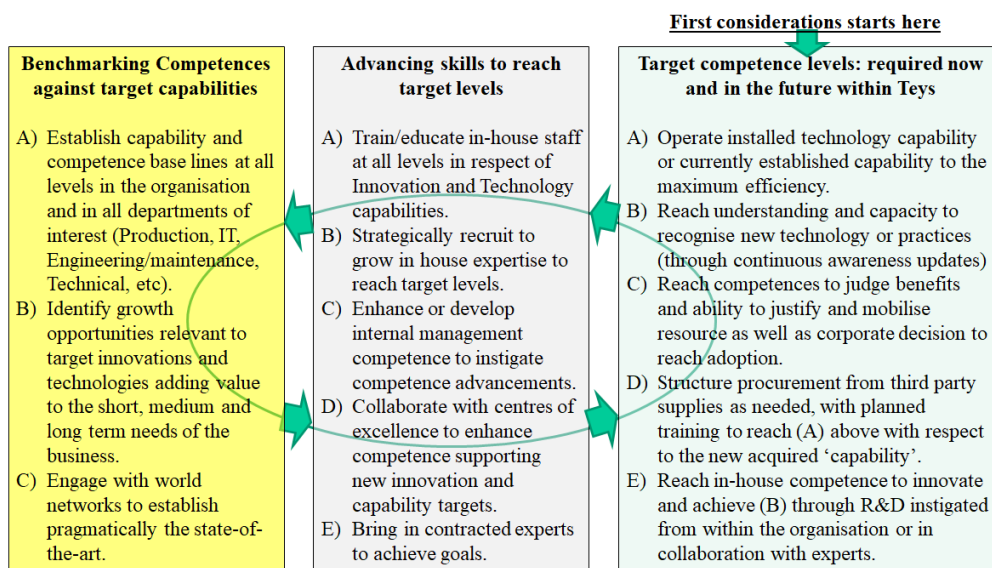
Team discussions, including the teams at operating sites, have reflected on the requirements and priorities. Competence development and achieving capability advance requires definition of targets, with supporting activities that will pave the path to execution. Figure 1 overviews the approach.



**Figure 1. Technology capability and competence development cycles**

**Team discussion and further progress**

The process has been for the project to instigate competence development following the process of Figure 2. The steps taken include planning specific meetings with site teams to review technology status, opportunities, challenges and success that have been reached or tasks to follow in the next steps.



**Figure 2. Instigating the cycle in competence development**

Teys sites at Rockhampton and Wagga Wagga were visited and engaged in the capability building program.

The meetings participants included long established employees with experience of many aspects of the site operations and graduates with professional qualifications. The introduction of Graduates into the business has been a deliberate step by Teys.

Both sites have been undergoing significant investment including development of new space. At Rockhampton there is considerable change and planned investment in automation R&D.

### **P.PIP. 0772 Leap4Beef - Industry Beef Boning Automation (led by Teys) – Phase 1 Automated Primal Cutting and Chine Removal**

The construction of the research and development facility at Rockhampton has been completed.

Teys Australia, MLA, Scott Technology and Greenleaf have been working collaboratively to identify automation development pathways using framework and models facilitated by Greenleaf. Collaboratively, the steering committee has utilised the product design model to prioritise development pathways. After considering all aspects, the steering committee has endorsed 2 development pathways (vertical scribe/cut hybrid and middles/chinning machine). Scott Technology has been engaged to provide quotes on these pathways.

### **P.PIP.0550 Teys Australia – Developing capability for external strategic partnerships with experts from Texas Tech University (TTU) Meat Science and Muscle Biology Program**

This project is focused on a number of in Strategic areas. Primarily in the development of talent, but also provides assistance to other areas such as diversifying product range and therefore earnings, development of the objective carcass measurement tools such as E+V camera and Yield camera, and producer engagement.

The objective of the overall project is to build capability in the Australian beef industry through numerous projects supported by Teys Australia and Texas Tech University. These projects are in the areas of:

- Identification of novel value adding opportunities/processes for low value beef primals and sub-primals in the US, Australian, Asian and European markets that add new R&D knowledge,
- Development of the capability of Teys Australia staff,
- Development of best-in-class cattle husbandry/handling practices to ensure best quality/grading outcome for each carcass,
- Validation of grading tools with particular reference to Value Based Marketing,
- Support of collaborative work in meat safety, and
- Supporting re-establishment of a long-term core meat science/safety capability with an applied global market focus between Australian and US tertiary institutions (and search for potential applications with local Australian universities).

Overall, the Teys Australia & Texas Tech partnership has made significant progress across a number of areas. The Leadership course has been very successful and will enable future leaders across the

business to have a sound understanding of meat science principles and also build a strong foundation of knowledge and networks across the business. The marketing and ag-communications internship resulted in the production of various communications which have been very beneficial for the business in terms of marketing and employee engagement. The success of the internship programs have resulted in development of new research assistant programs to enable these opportunities to be developed with locally based Australian students, which will further build knowledge and capability of future graduates for the Australian red meat industry.

The food safety projects have provided support to underpin Teys continuing strong focus on shelf-life and consumer safety. The value-add projects have provided strong foundational work, which ultimately will allow Teys to develop new/improved product lines to provide the best outcomes for the TAFS and Teys business. The strong collaboration work on several projects between various Australian universities and TTU provide an excellent model to build knowledge and capability within the Australian red meat industry.

### **P.PIP.0565    Supply Chain Feedback**

This project is focused on producer engagement.

Designed to boost the productivity and profitability of producers, this project aimed to enhance feedback and provide extension to drive on farm adoption. To do so the project officer designed and implemented an extension program. This program involved several activities to raise awareness of compliance issues, and management interventions to improve compliance. This was accompanied by workshops and other participatory activities to involve producers in setting the direction of extension activities and provide suggestions to improve feedback, grids and general communication and relationships with the processor.

Numerous insights were gathered from engagement activities with producers across the eastern seaboard. These were used to design and deliver new feedback reports including feeder feedback, animal health feedback, feedback using objective carcass measurement and pilot a value based marketing package of grid and feedback. Producers were pleased with the improvements and urge processors to enable interfacing with on farm management software programs to drive decision making.

Development of the project officer and livestock team provided opportunities to improve the processor and producer relationship to foster a trusted advisory dynamic. It is only with the continual feedback and discussion can the relationship develop to one that drives the increased value of the red meat supply chain and consistent satisfaction of consumers.

Many opportunities were realised with the scope of the project to further develop and deliver extension programs, activities and feedback that promote adoption of practices resulting in on farm change that drive social, environmental and economic sustainability of the industry. Unfortunately, this project was terminated due to Teys placing these type of engagement activities on hold in the current challenging environment.



### **P.PIP.0569 Feedlot Pen Stabilisation**

This product is focused on reducing total manufacturing costs and improving meat safety and quality. It is currently at Milestone 7 but will be finalised by the end of the year.

In southern Australia, wet weather during colder winter months can lead to increased manure depth and cause dags to form on cattle hides. These conditions can significantly influence processing profitability if not managed properly. In particular, under Australian Standards, animal cleanliness is assessed prior to slaughter. This requires animals to be free from mud and dags and abattoirs are often required to wash cattle more intensively during wet and cold conditions.

Tey Australia have identified that, in addition to impacts such as decreased carcass weight gain, adverse effects on meat quality and increased food safety risks, cold and wet conditions can lead to increased animal health problems including cattle lameness due to softening of the hooves, odour production, damaged pen foundations, and increased health and safety risks to pen riders.

Feedlot wet pen management is vital to mitigate some of these potential impacts, however, during wet winters, when mud builds up in pens, it is often not possible to bring machinery, such as excavators, into pens and if it is possible, pens are often over excavated and increased repair and maintenance is required once dry conditions return.

Tey Australia are conducting a trial at their Charlton Feedlot to assess the effects of pen stabilisation on cleanliness of slaughter cattle. They are conducting the trial as a PIP project with Meat & Livestock Australia (MLA) and Australian Meat Processor Corporation (AMPC).

This project involves a 3 year data collection phase to observe the performance of stabilised pens over non-stabilised pens at the plant level (in terms of dag loading, meat microbiology, cattle productivity, meat quality and animal health and welfare) and at the feedlot level (in terms of cleaning intensity, pen surface stability and repair requirements, dag loading and washing requirements, and costs of pen repairs).

The trend analysis showed that there was no apparent net benefit in any of the parameters being measured that would justify the use of the stabilisation technology in a commercial feedlot. As a result it has been agreed to finish the project early and write up the final report.

### **P.PIP.0576 E+V Carcass LMY Grading**

This project is focused on producer engagement. It is currently at Milestone 5. Currently Tey reports to producers in their feedback the overall carcass lean meat yield. This figure is currently derived from an algorithm based on the current MSA inputs and hot dressed carcass weight. Over time the intention is to replace that figure with a more accurate figure derived from a carcass scan using E+V camera technology and maybe DEXA in the future. There could also be value in providing more detail around primal yields if future research shows that producers can influence that yield through better genetic selection and/or nutrition.

The system has been trained against an initial data set which was provided by conducting a detailed cut out of a phenotypically diverse range of beef carcasses. The E+V yield camera showed good potential for predicting the commercial bone-out yield of carcasses and their primals. Based on the early bone out training data, the E+V yield camera described between 67% (Cube Roll) and 92% (Silverside) of the variation of individual primal cut yield in steer carcasses and between 63% (Cube Roll) and 90% (Silverside) of the variation of individual primal cut yield in heifer carcasses.

### **P.PIP.0753 Analysis and extension to support beef producers in improving animal health performance**

Teys Australia have decided to expedite the project and have started to release data to producers.

On-site data verification activities were placed on hold due to domestic travel and operational restrictions in response to COVID-19, and the shift in focus to the roll out of Animal Health Summary reports to Teys Australia's producers as soon as possible. On-site verification will be transitioning to Teys Australia QA staff. Training covering how to conduct onsite verification was developed and provided to Teys Australia as a part of these milestones.

The data focus for this quarter was on the development of internal reports that would assist in Teys Australia supporting producers and on analysing the cost of disease defects and to support onsite verification activities. Restrictions on travel and social distancing rules also prohibited in person interactions (e.g. Supply Chain Capability Building Workshops/Producer Days). Food and Veterinary Services Pty Ltd have developed short webinars that will be housed on the Teys Australia Producer Portal. These will allow producers to access information on the Animal Health Summary report and the project that would usually be delivered through producer workshops.

Data analysis focused on the cost of offal condemnations due to animal health defects and processing defects at post-mortem inspection. A public report for the Health4Wealth group provides the headlines from this data analysis and initial learnings from the data analysis phase.

Teys are also working with the ISC's Livestock Data Link with the aim of producing benchmarking data.

### **P.PIP.0746 Digital Value Chain Officer**

Through this project Teys have been focused on the identification of a suitable electronic national vendor declaration system to help improve data accuracy, efficiency and automation.

There has also been work done to improve automation of feeder cattle feedback tools. These upgrades will improve the accessibility of the information and allow for improved flow of feedback information back to feeder cattle suppliers. The digital value chain project officer has collaborated and assisted with several other projects underway in the business. This has included pilot VBM trials, development of feedback reports for objective carcasses measurement and animal health reporting.

A number of professional development opportunities were undertaken in the last quarter including attending industry forums, extension and facilitation training and digital value chain group workshops. This has enabled the digital value chain officer to continue to build strong networks across industry as well as continue to develop new skills.

The main focus areas for the next stage of the project will include delivering the current projects underway. The eNVD project will continue to the next stage with recommendation of vendor, project time-frame, budget, and capex application to be put forward to the business for review. The next phase of work will involve development and implementation of the proposed solution.

The upgraded feeder cattle feedback tools will be rolled out with various training and support materials in the next quarter. The potential to automate several business reports will be explored

further over the next quarter including the development of benchmarking reports to assist the Animal Health project.

**P.PIP.0768 Dynamic alignment in the red meat supply chain – developing a supply-side alignment strategy**

This project is focused on producer engagement.

This project has been cancelled due to movement restrictions caused by Covid 19 and the decrease in economic activity created by the low cattle numbers to market due to the herd re-build.

**P.PIP.0769 Northern ICMJ Competition**

This project is focused on industry engagement and capability building (talent). It is currently at Milestone 2.

Tey Australia and the Central Queensland University (CQU) partnered with the Australian Intercollegiate Meat Judging Association (ICMJ) to *'inspire and develop future professionals in the global red meat industry'* via the delivery of the Northern ICMJ Conference and Workshop.

The expansion of the program to Northern Australia enhanced the opportunity for northern red meat agribusinesses to connect with and to attract students to consider their respective businesses as future career pathways. Importantly, the ICMJ Northern Conference also provided a platform to showcase the northern Australian beef industry and highlighted the key differences to southern Australia both at the on-farm production level, through to processing and meat quality differences.

The ICMJ was deferred for 12 months due to Covid 19.

**P.PIP.5015 Development of beef LMY prediction using E+V hot and cold carcass grading cameras**

This project is focused in the Strategic areas of producer engagement and Objective Carcass Measurement. It is currently at Milestone 4.

The hot and cold cameras have been installed at the two nominated processing plants. The boning trials have been completed at the northern site and have just commenced at the southern site. The two sites is to ensure that the cameras are presented with the widest possible phenotype variation in the carcasses.

**P.PIP.5016 Parallel Carcass grading trial**

This project is focused in the strategic areas of producer engagement and Objective Carcass Measurement. It has been completed.

The E+V cold carcass grading camera was calibrated against the Australian grading standards and installed into one export registered meat establishment.

The following attributes can be assessed by the E+V cold carcass camera if the camera is used by an accredited grader:

- i. AUS-MEAT Marbling (0-5);
- ii. MSA Marbling (100 – 700);
- iii. Meat Colour; and
- iv. Fat Colour

As a piece of technology the cameras are very reliable and produce repeatable results when the carcasses are quartered correctly and the camera placed properly.

The single most important piece of work in the project was done by the ALMTech group. They developed the method through which the technology can be compared to the best human graders. As long as the cameras were no more variable than the variability that exists between the expert graders then the camera can be approved for measuring that attribute. The development of this process will pave the way for other grading technologies to be approved.

#### **V.RDP.2003 ALMTech I**

This project is focused in Strategic area number 2 and 3, Producer engagement and Objective Carcass Measurement. Teys are supporting the subsequent Rural R&D for profit project “ALMTech II”.

Tey's have participated actively with this Rural R&D for profit program as it complements the Teys overall business strategy. Teys have shared its work with the carcass grading and yield cameras.

#### **V.TEC.1701 Beef DEXA Supply Chai Grading**

This project is focused in Strategic area number 2 and 3, Producer engagement and Objective Carcass Measurement.

It is currently going through some calibration work. When the Mobile CT Scanner arrives further trials involving carcass scanning using DEXA and other technologies with some carcasses being boned out in detail will occur.

The intention is to subject a cohort of carcasses to scanning by DEXA, E+V, other systems such as the Frontmatec BCC-3, CT scanning and a detailed systematic bone out. This would allow a fair comparison between the available technologies.

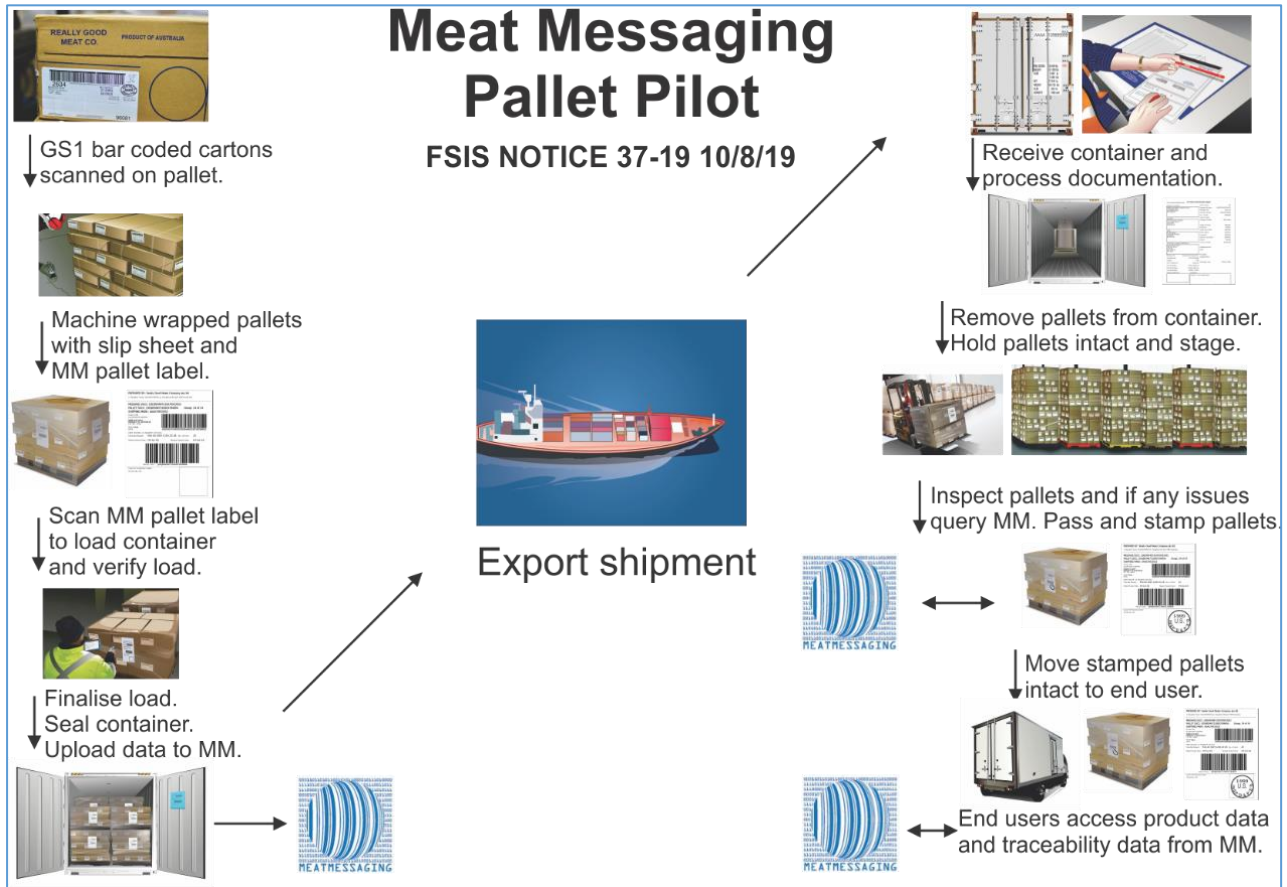
#### **AMPC project 2016.1047 Pallet label – Shipping mark**

This project is focused in Strategic area number 9, NextGen Digital Connectivity.

This is an AMPC funded industry project. It is a logical extension of P.PIP.0523 – Using GS1 barcoding to resolve missing port marks in the USA. We are the first processor to participate in this pilot as we were in the development of the process to resolve missing shipping marks in the USA. It has helped

us grow our capability in the area of eMessaging. We have evolved this in our North American markets so far that there is now no paper of any description when we export loads there.

The diagram below shows the summary steps of the project pilot:



The pilot is intended to demonstrate operationally that the proposed process is robust and commercially viable. As the pilot progresses additional establishment supply chains are likely to be added. The pallet protocol may evolve from the feedback taken with pilot participants.

The commercial objective of the pilot is to provide an alternative to applying shipping marks on individual cartons by moving intact pallets, identified with inspection stamped placard, through the supply chain to the end user. To achieve this objective the Australian Meat Industry Meat Messaging data portal is used as a verification system based on each carton’s unique GS1 barcode. For more information on the GS1 standards for carton, pallets and consignments visit GS1 US <https://www.gs1us.org/>.

9 loads have been sent so far. The loads have readily passed import inspection and been transferred to the end user with no problems.

It should also be noted that MLA have signalled their intention to over time cease offering their US carton remarking service as the meat messaging system is now fully functional.

**eMTC**

DAWE have recently circulated the attached draft electronic Meat Transfer Certificate (eMTC) Meat

Notice. The eMTC uses the same platform and web portal as the pallet label trial and the alternate method of remarking US bound cartons with the shipping mark.



## Meat notice

<b>Meat notice number:</b>	2020/07
<b>Meat notice title:</b>	Electronic Meat Transfer Certificates (eMTC)
<b>Category:</b>	Guidelines

NSFS reference	Issue date	Date of effect	Review date
??	<publication date>	Immediate	December 2022

Contact officers	Distribution categories
<i>Insert as appropriate</i>	<input checked="" type="checkbox"/> Central and regional office <input checked="" type="checkbox"/> Departmental on-plant officer(s)
<i>Insert as Appropriate</i>	<input checked="" type="checkbox"/> Managers, export meat establishments <input checked="" type="checkbox"/> State/territory regulatory authorities <input type="checkbox"/> Approved Islamic organisations <input checked="" type="checkbox"/> Other: Please specify category

### 1. Purpose

Export legislation requires the transfer of meat and meat product between establishments to be accompanied by a Meat Transfer Certificate (MTC), which can be either manual or electronic. This Meat Notice outlines the requirements for electronic systems that can produce electronic MTC (eMTC).

### 2. Scope

This notice applies to all export registered establishments that want to utilise electronically generated Meat Transfer Certificates (eMTC).

Use of the eMTC is voluntary.

### 3. Definitions

The following table defines terms used in this notice.

Term	Definition
Approved Arrangement (AA)	An arrangement approved by the department under the Export Control legislation.
Approved Islamic Organisation (AIO)	An organisation approved by the Secretary or delegate in accordance with the requirements detailed in the Export Control Act and subordinate legislation for the purposes of supervising the production and certification of halal meat for export.

Term	Definition
Area Technical Manager (ATM)	A departmental officer with veterinary qualifications who has responsibility for the supervision, technical performance, assessment and verification of technical standards and operations in a defined group of export meat establishments within a geographic area in a state or states.
Electronic Meat Transfer Certificate (eMTC)	Electronic version of a Meat Transfer Certificate.
GS1	International organisation that develops and maintains standards for supply and demand chains across multiple sectors.
Meat Messaging system	The "Meat Messaging" system is an online tool for the creation, sending, receiving, attestation statements and compliance declaration of meat products (carton, carcasses, carcase portions, pallets, bulk packs and containers) GS1 EANCOM messages. The MeatMessgaging.com portal is a program reporting to the Australian Meat Industry Language and Standards Committee and is administered by AUS- MEAT Limited.
Meat Transfer Certificate (MTC)	As defined in the Approved Arrangements Guidelines means meat transfer certificate which is the form approved by the secretary for use when export eligible meat and meat products are transferred between export registered establishments. This form may be electronic.

#### 4. Background

The department recognises the benefit to industry both in terms of improved efficiency and integrity that an integrated, digital approach brings to the export supply chain. In recognition of these benefits, this notice articulates the requirements to enable industry to operate digitised MTC processes.

#### 5. Systems

##### 5.1 eMTC

Registered meat establishments must amend their Approved Arrangement (AA) to incorporate the use of eMTC systems before they can use them. The Meat Messaging system is one such system that has the capacity to meet all the requirements listed below.

The department will approve systems that meet the following criteria:

- the message must be able to be viewed by the department in a format similar to the existing paper MTC, including the Australian Coat of Arms, and contain all the information currently required (see Attachment A).
- the message must be compliant with the UN/EDIFACT standard and in particular the “EANCOM 2002 Syntax 3 (subset of UN/EDIFACT D.01B) despatch advice message and receiving message”. For further information on the UN/EDIFACT standard contact GS1 Australia.
- the message must contain the EANCOM 2002 despatch advice message that carries the information required by the Export Control Act and subordinate legislation:
  - a. a full description of the meat or meat products including storage conditions (i.e. whether they are chilled, frozen or shelf stable);
  - b. the name, address and registration number of the despatching establishment;
  - c. the date or dates which the meat or meat products were last prepared (other than stored handled or loaded) before despatch;



- d. the quantity of meat or meat products in the consignment and number and kind of packages (if any) in which the meat or meat products are packed;
  - e. the identification of the vehicle used to transport the meat and meat products and a description of any means of security applied to the meat and meat products;
  - f. the name and address and registration number of the establishment to which the meat or meat products are despatched;
  - g. if the meat or meat products are prepared in order to meet the importing country requirements of one or more identified countries — the names of those countries;
  - h. a declaration stating that the following are complied with:
    - the conditions and restrictions on export specified in Part 4 of these Orders that must be satisfied before the meat and meat products may be exported from Australia are complied with;
    - the importing country requirements for the meat and meat products are complied with;
  - i. a declaration stating that all the information given is true and complete.
- the message must include the Approved Islamic Organisation (AIO) that performed halal supervision if the meat is to be certified as halal.
  - the message must be distributed in the same way as is currently the case with the pre-printed paper certificate (electronic copies; held at the consigning plant and the receiving plant, with copies available upon request or during audits by the department).
  - the received message be distributed in the same way as is currently the case with the pre-printed paper certificate. (electronic copies; held at the receiving plant and the consigning plant, with copies available upon request or during audits by the department). It must be endorsed that the load has been received either satisfactorily or unsatisfactorily.
  - where an establishment is using eMTC and wants to send product to an establishment that is not using eMTC then the following options are available to them.
    - Print two paper copies, sign and send with the load.
    - Use the eMTC messaging to record both the sending and the receiving of the product.
    - The sending establishment to self-receipt (e.g. the sending establishment sending the receipt message) when they receive a paper record of receipt/ reconciliation from the receiving establishment.
    - There is an option for the sending establishment to have a website-based system to allow the receiving establishment to record the receipt/ reconciliation and then create the receipt message.
  - where a consignment is from an eMTC non-enabled establishment to an eMTC enabled establishment:
    - Use existing paper MTC.
    - There is an option to have the eMTC enabled receiving establishment to have a website-based system to record/create an eMTC from the eMTC non-enabled establishment.

## 5.2 MTC printed on site

The department will also approve, on an individual establishment basis through the AA, the use of MTCs that are printed on site.

The department will approve systems that meet the following criteria:

- i. the certificate must be printed in an identical format to the current pre-printed certificate including the Australian Coat of Arms and all currently required information (see attachment A).
- ii. it must be uniquely numbered with the numbering system approved by the department. It must contain as the first 4 digits the registered establishments number. The number must not be able to be duplicated for at least 3 years.
- iii. it must be distributed and reconciled in the same way that the current pre-printed form is.

## 6. Trial messages

For an establishment to move to using eMTCs the electronic messaging behind the eMTC messages will need to be tested to ensure that it is fully functional. Three 'test' eMTCs must be produced for appraisal at the time that the establishment presents their amended AA for approval.

## 7. Responsibilities

### 7.1 Establishment Management must:

- i. Amend their AA to include the use of eMTC if they wish to utilise eMTC.
- ii. Initially run test eMTC messages to ensure the system is fully functional and provide three 'test' eMTC for appraisal at the same time as their AA amendment application.
- iii. Only use the electronic system once written approval is received.
- iv. Notify the department as soon as they become aware of any issues affecting the integrity of the eMTC system.

### 7.2 Departmental OPV/FSA will:

- i. Provide establishment management with a copy of this meat notice as soon as possible.
- ii. Once approved, verify the functioning of the amended AA in accordance with the Meat Establishment Verification System.

### 7.3 Area Technical Manager (or Field Operations Manager for Tier 1 establishments) will:



- i. Review and approve AA amendments if appropriate, along with the 'test' eMTCs.
- ii. Verify through audits that the occupier is complying with this meat notice.

### 7.4 Audit Assurance Group will:

- i. Review and approve AA amendments if appropriate, along with the 'test' eMTCs.
- ii. Verify through audits that the occupier is complying with this meat notice.

Adam Balcerak  
 Director Export Meat Program

Attachment – Example eMTC – Senders copy (normally in triplicate – sender, receiver and third copy)

 <p><b>Australian Government</b>                  Department of Agriculture,                  Water and the Environment</p>		<p><b>Page 1 of 2</b>                  Senders Copy</p>	
		<p><b>MEAT Transfer Certificate</b>  <b>SSCC 993487310070933932</b>  <b>Date 20181210</b></p>	
 <p><b>(00)993487310070933932</b></p>			
Description of Consignment			
S/L Est's	S/L Dates	Product Description	Number and Kinds of Packages or Carcases
AAAA	20180718-20180718	BULK	30 CARTONS 816.0000 KGM
Identification Marks for Specific	Market Eligibility	Product Endorse Code*	Test Status Code* Production Est's
AAAA070933932			0 AAAA 20180719-20180719



