

US pallet label pilot

US Pilot for pallet
labels as an alternate
system of shipping
mark

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9.0 Appendices

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1.0 Executive Summary

The Australian Meat Processors Corporation (AMPC) have engaged with Management for Technology, on behalf of the project's management group, to provide a report on the US pallet label pilot trial.

The pilot trial defined a protocol through which US Inspection facilities could link a consignment to its foreign inspection certificate via a pallet SSCC label. The protocol also defined the use of this procedure only when the consignment had a missing or illegible shipping mark.

The project also defined the capabilities required for a company to participate in the trial and provided a list of companies that passed to FSIS. The protocol itself was also developed through consultation between the project management group and FSIS representatives, published as an FSIS Notice (62-20) and as a revision to FSIS Directive 9900.5 (Rev. 1 Section E, VII).

Once consignments began shipping from exporters, the level of compliance to the protocol was monitored. Several issues surrounding pallet wrapping, appropriate materials used for pallet labels and an additional requirement of using slip sheets to reduce damage to the pallets were uncovered during this stage.

To date, 13 of 14 consignments have successfully completed shipment and passed inspection using the protocol. This shows that participants can utilise the protocol and web portal effectively.

The project management group has been engaging FSIS and the Australian Government to develop a process through which the protocol can be expanded to any exporter and inspection facility. While the project was running, only the initial list of approved participants was allowed to use their pallet labels to link consignments to their foreign inspection certificates. This process would allow a company to be added to this list.

It also provides an avenue through which other product types can be validated with the protocol. Previously, only ground meat used for burgers was used. The protocol will allow containers of a single meat product type to use the protocol.

2.0 Introduction

2.1. Purpose

The purpose of the US Pallet Label Pilot was primarily to help reduce costs to exporters for wasted shipments due to missing, incorrect or illegible shipping marks (i.e., Australian government issued health certificates) or labels by allowing a process by which shipments can be validated and accepted by the Pallet SSCC Labels (Placards in the US).

2.1.1. What was the previous process at the start of the project?

Previously, if a shipping mark was missing or illegible, then an inspection agent could use a shipping unit barcode to verify the load. However, a shipping unit barcode refers to the case/carton label serial number component.

A pallet can be composed of 50 cases in some product types, meaning that the inspection agent would need to manually verify each cases serial number.

2.1.2. What were the project's proposed changes?

The pilot proposed to include an additional option whereby an inspection agent can source and verify the foreign inspection certificate for a consignment based on the pallet's SSCC number.

The SSCC would be matched to a "Message" SSCC number on a web-based portal. The agent would only need to enter in a single number instead of many, to verify that a foreign inspection certificate was provided for a consignment with a missing or illegible shipping mark.

This had the added benefit of reducing the time taken to disassemble and reassemble a pallet, which would carry the risk of damaging cases and product.

2.2. Scope

This project is the result of a previous research project (AMPC 2019-1004), where the FSIS approved of a demonstration showing how US Inspection facilities would be able to utilise pallet barcodes from Australian Exporters as an alternative to a shipping mark.

The project needed to provide the following:

- ◆ Define pilot protocol with FSIS.
- ◆ Compile, and provide, a list of requirements for an Australian Exporter to pass in order to participate in the pilot.
- ◆ Compile and provide a list of participating Australian Exporters and US Import Inspections facilities to FSIS.
- ◆ Create Training material.
- ◆ Perform information sessions to industry.

3.0 Project Objectives

The project has the following demonstrated project outcomes:

- The primary objective of the project is the acceptance by FSIS of the use of SSCC pallet labels as an alternative to applying a shipping mark to every carton exported to the US for a limited number of product types.
- The longer-term objective is to increase the range of product type to the US that FSIS will accept under this new proposed protocol.

4.0 Methodology

5.1 Pilot participant consultation

- ◆ Consulted with Australian exporters to determine which would be suitable to participate in the pilot project.
- ◆ Requirements included:
 - ☞ Already GS1 compliant (GS1 capability)
- ◆ Inform FSIS of which Australian Exporters, Import Inspection Houses and final customers were compliant. Each combination was defined as a supply chain.

5.2 Pilot Protocol development

- ◆ Work with Australian Exporters and US Inspection facilities to ensure the protocol was being implemented correctly.
 - ☞ This was achieved through site visits and online information sessions.
 - ☞ Training material was made, including online, publicly available webpages with step-by-step instruction and multiple online seminars detailing the project and pilot protocols.

5.3 Monitoring compliance

- ◆ Continuously monitor and prepare an outcome report on the completion of each Pilot Protocol consignment. Consignments that completed inspection and had details reported back to the project management group were considered complete and compliant with the pilot protocol.

5.4 Implementing a process for the future

- ◆ Develop a formal process by which Exporters can become participants in the project, overseen by Department of Agriculture and FSIS.

5.0 Project Outcomes

5.1 Milestone 1 – Pilot Protocol and Capability assessment

The beginning of the pilot started with consultations between the project's management group, FSIS and AMPC. FSIS was engaged with to help develop a protocol through which US import inspection facilities could review incorrect shipping marks with a pallet label.

The result of this work was the FSIS Notice 37-19 (since discontinued by Notice 62-20) and the FSIS Directive 9900.5 Rev 1.

Figure 1. Section E Procedures for Correcting Shipping Marks when Using Barcodes.

4. When the foreign country and establishment are eligible for the use of barcodes to rectify missing or completely illegible shipping marks, IPP are to review documentation provided by the import inspection establishment management to verify that the shipping units are part of the lot identified on the foreign inspection certificate. Appropriate documentation would include:

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- a. A letter from the CCA attesting to the identification of the shipment; or
 - b. A report provided by the exporter that links the barcodes to the lot identified on the foreign inspection certificate.
5. IPP are to verify that the barcode for each shipping unit matches the documentation provided. The numbers after the (21) identify the unique shipping unit number.



6. IPP are to permit import inspection establishment personnel to apply the shipping mark to the shipping units if the documentation links the barcode to the foreign inspection certificate.
7. IPP are to verify whether the shipping units have:
 - a. Been identified with the correct shipping mark and release the product; or
 - b. Not been identified with the correct shipping mark. IPP are not to release any shipping containers that have not been identified with the correct shipping mark.

Source: Adapted from USDA.

Combined, these documents notified import establishments that the Directive 9900.5 had been updated to include a provision through which the shipping unit serial number on a pallet label could be used to form a link between shipment and the foreign inspection certificate.

The pilot protocol sought to add the pallet SSCC number to this list. This would reduce time it would take to check each individual shipping unit serial number and associate it with the foreign export certificate. A web portal, Meat Messaging, was used to store consignment details, including the foreign inspection certificate and shipping mark, linked with the pallet SSCC number instead.

A capability assessment questionnaire was developed to screen for suitable exporters and import facilities to the pilot. A list of capable and interested Australian Exporters, US Import Inspection facilities and US-based customers. This list was provided to FSIS as part of Notice 37-19.

5.2 Milestone 2 – Monitoring Compliance

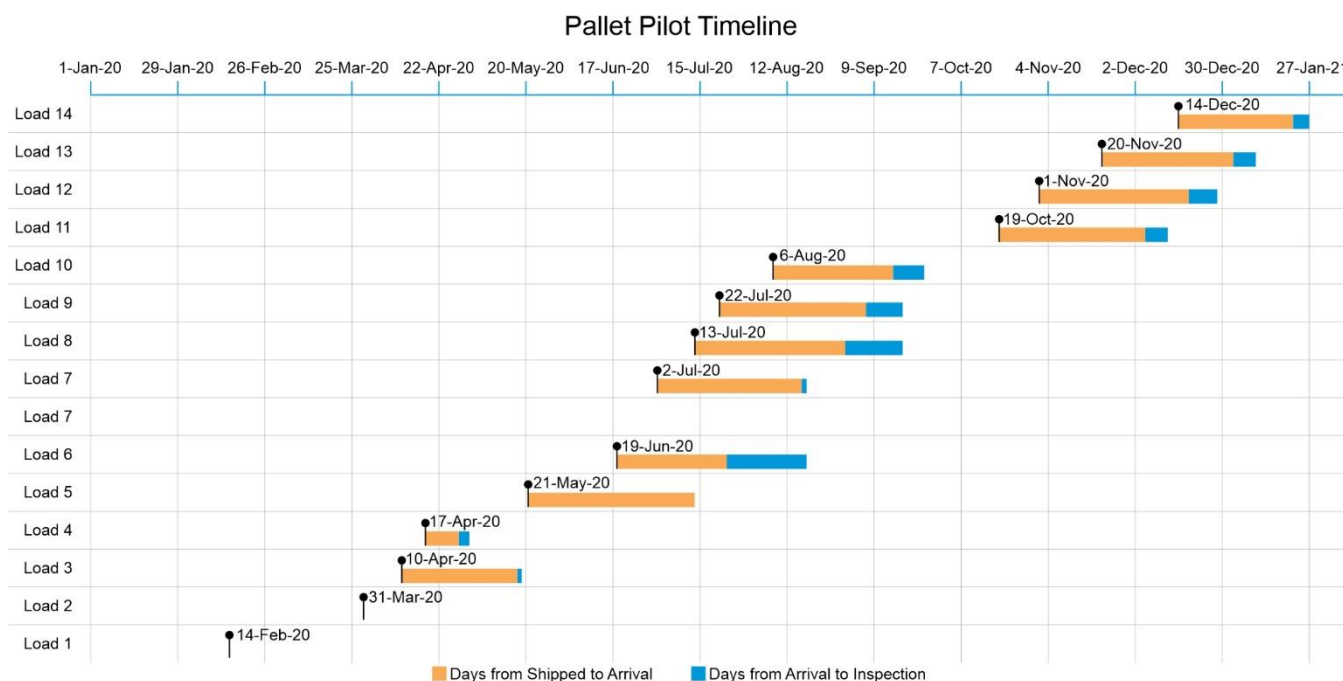
Milestone 2 was published on 15th December 2020. At the time of publishing, the pilot had been running for 11 months. Five consignments had been completed successfully, and the results communicated back to the project management group.

Monitoring the level of compliance was achieved through reports from the export, import and customers that a shipment had been shipped, arrived, or inspected. Additionally, a site visit of a participating import facility was conducted.

5.3 Milestone 3 – Compliance, Training Material, and Information Sessions

By publishing of Milestone 3, 13 out of 14 consignments were successfully processed with use of the pallet label protocol. They represent processing consignments of a single product type through three supply chains composed of three export sites, two inspection houses and two customers. The diagram below details the consignments shipping, arrival, and inspection dates.

Figure 2. Timeline of pilot pallet consignments.



Site visits to both exporters and US import facilities were conducted to document the processes involved in Loading, Unloading and Inspection.

What was learnt is detailed through the sections.

5.3.1. Consignment Export Process

The major steps of the export consignment process that are of concern in this pilot involve the case palletisation, with slips sheets and plastic wrap, the placement of the SSCC placard, and entering consignment details into the Meat Messaging system.

Palletising the cases.

Cases need to be formed into tight logistical units during shipments, both to protect the cases and to move them easily and safely. This process is known as palletisation.

The following is a step-by-step breakdown of this process (Figure 3), taken by observing the exporters participating in the pilot trial:

1. Two-way plastic pallet is placed near the cases.
2. Plastic slip sheet is placed on top of the two-way pallet.
3. Cases are stacked together and scanned.
4. Another slip sheet is placed on top.
5. Palletised cases are then lifted to the machine wrapper.

NOTE: Pallet is wrapped too, folding the bottom slip sheet against the cases.

6. Pallet placards are stuck on top of the plastic wrap, on opposite sides of the palletised cases.

Figure 3. Process for palletising pallets for shipment.



At this point, the pallets are considered a logistical unit and are loaded into the shipping container.

The most important measures that can be made to ensure that no damage is made to the cases during shipping is ensuring that the cases are wrapped, with a slip sheet placed on top and bottom. Further details on why the slip sheets, and the two-way plastic pallets are needed is explored below. Consignment issues due to not following these measures are explored in Section 5.3.1.

Slip sheets.

Placing slip sheets on the top and bottom of each stack of cases decreases the potential for damaging product during the loading and unloading process (as depicted in Figure 3: Step 4). The top surface of the bottom pallet must have a suitable protective layer to minimise the potential for damage related to the use of machinery that will separate pallets during unloading (such as roller forks and forklifts with push/ pull attachment). If the top is exposed, it will result in damage due to human error when operating forklifts or roller forks (see Section 5.3.1).

The thickness of the slip sheet is also important. Utilising slip sheets that have a thickness of at least 800um is pivotal to its successful utilisation. They are designed to withstand the elements, and they will not crack, split, or absorb moisture.

Pallet wrapping

Both the wrapping of pallets and the application of the pallet placard must be suitable to maximise protection and the retentions of the placard. Figure 4 below shows an automatic pallet wrapper that is covering a suitable area of the pallet.

The automatic pallet wrapper requires both the slip sheet and the specialised, plastic pallet for the containers to sit on top of. This is not a ubiquitous process in the supply chain industry, but it does provide an effective solution to wrapping containers in a slip sheet tightly.

Forklifts fitted with either a specialised push/ pull attachment, or roller forks that use counter-spinning rollers, can then be used to move slip sheet pallets during unloading.

Figure 4 - Pallet after being wrapped on a machine wrapper.



Loading pallets into the shipping container.

The pilot trial's volunteer organisations allowed photos to be taken to document the pallet loading process. Figure 5 and Figure 6 depict the loading process by one of the organisations during the pilot trial. The Meat Messaging-linked SSCC placard can be seen on the outside of the slip sheet in Figure 5.

Video of the process was also recorded. Further details are covered in Section 5.3.2.

Figure 5 - Pallet showing pallet placard with SSCC and pilot pallet shipping.



Figure 6 - Pallets with pallet placards loaded into shipping container.



Entering consignment information into Meat Messaging.

Information systems that deal with consignments and shipments can communicate with partner's system through the Meat Messaging website. Complete shipment and delivery information (consigner and consignee details, addresses, etc.) can be entered into the portal, and retrieved, edited, or added to at any point before it is finalised as a GS1 EANCOM Dispatch Advice message.

Consignment information can be entered through the Meat Messaging portal manually in case of a system error. Figure 7 shows a screenshot of the portal, where new messages can be made or uploaded if this occurs. Datafiles with this information already compiled can also be uploaded into the portal, instead of manually entering in the information.

Figure 7 - Meat Messaging portal can be used to enter in consignment information.

The screenshot shows a web interface titled "Sending messages". Below the title is a paragraph of instructions: "Use this section to create, edit and send Meat Industry GS1 EANCOM Despatch Advice messages about consignments you are transferring between export establishments, exporting to a another country or to domesticate export product." Below this are two options, each with a button and a description:

1a	<input type="button" value="New message"/>	Create and send a new "Meat Message"
1b	<input type="button" value="Upload file"/>	OR upload a file to create and send a new "Meat Message"

5.3.2. Consignment Import and Inspection

Once the consignment has been shipped overseas and received by the import inspection houses, the shipment containers are unloaded, staged in rows, and inspected by officials. Some pallets may have cases taken for random food safety sampling (if selected by FSIS for an exam) and given updated pallet information. At each stage, the Meat Messaging portal can be used to retrieve and confirm this information. Some shipments may stay intact having a label and certificate verification.

Pallet Unloading Process.

Once shipments are received at the import inspection facilities, they are unloaded and prepared for inspection. The process follows these general steps (Figure 8):

7. Shipping container's seal is checked, and status recorded.
8. Pallet's temperature probes are recorded and checked against requirements.
9. Prepare slip sheets so pallets can be removed with forklift push/ pull attachment.
10. Forklift grabs slip sheet edge to pull pallet onto forklift tines.
11. Palletised cases are placed onto a wooden pallet base.
12. "Stage" for inspection (each pallet is lined up in a row next to each other).

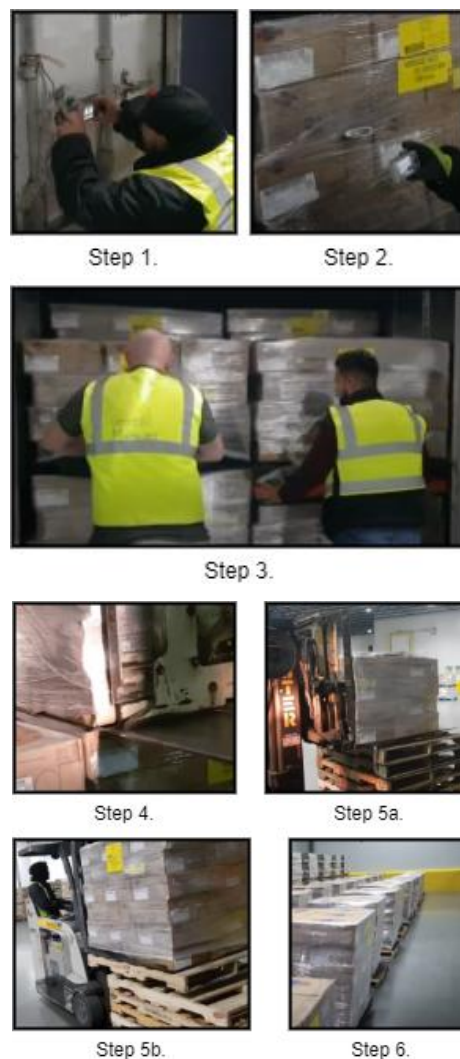
A video explaining the unloading process was released on the Meat Messaging YouTube page, to allow the trials contributing organisations and other interested parties easy access to the unloading process (Meat Messaging 2021a).

The roller forks can be used for "pallet-less" handling. Roller forks are in fact 'standard' lift truck forks with two layers of rollers. When the under most row of rollers touches the floor, it causes the uppermost rollers to rotate in the opposite direction whereby the forks slide under the slip sheet without disturbing the products.

Some instances of the pallet unloading process were also documented. Figure 9 and Figure 10 depict the unloading process with a forklift and roller fork, respectively.

Footage of a roller fork unloading a trial pallet can be found on the Meat Messaging YouTube page. See Section 5.3.5 for more details on damaged cases.

Figure 8 - Pallet unloading process, as observed at a participating inspection facility.



When the forks are lifted-up, the rollers 'fall' downwards and place the products securely on the upper side of the forks, enabling the products to be unloaded in the opposite loading order and works with shipping container floors.

A roller fork consists of a special lift truck fork that serves as a supporting frame with a special hinge in the heel allowing it to always lay flat on the floor. Inside the fork are two layers of rollers, one on top of the other, that drive each other when the forks are moved over the floor.

The basic principle is that the upper rollers rotate at the exact same speed, but in the opposite direction of, the lower rollers, which are in contact with the ground. When the roller forks are lifted from the ground, the rollers automatically lower and the load is held on the forks. This interaction is depicted in Figure 11.

Figure 9 - Pallet being unloaded with the SSCC placard clearly visible.

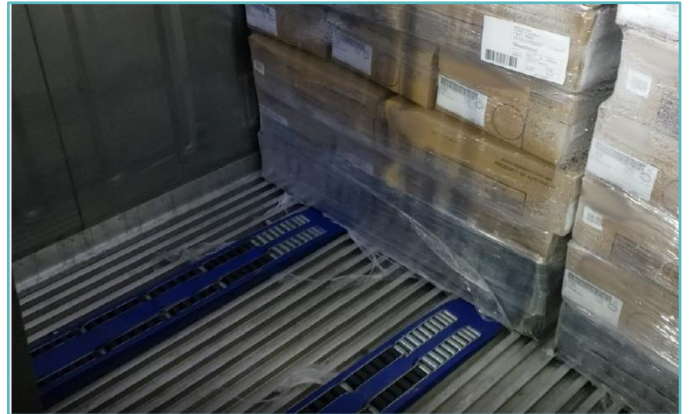
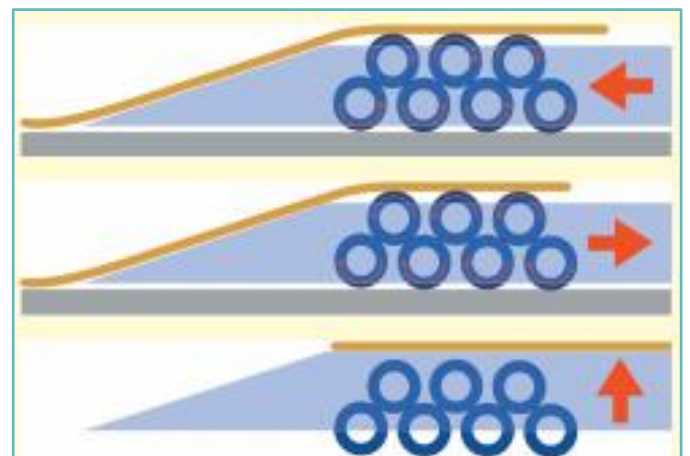


Figure 10 - Roller fork being used to unload a pallet, passing under pallet's slip sheet.



Figure 11 - Diagram of the forces of movement in action in a roller fork.



Pallet Inspection

Once consignments arrive and are unloaded at an I-house, IPP need to verify the load by checking pallet and case labels.

Inspection best-case scenario:

The best-case scenario once the pallets have been unloaded, is that there is no damage to the cases or the pallet placards. Inspectors will then be able to assess the pallet, verify details visually and give it an inspection mark, as seen below:

6. *“Stage” the pallets for inspection.*

Each pallet is lined up in a row next to each other.

7. *Stamp placard.*

Once consignment details are confirmed, the pallet label is stamped with a US inspection mark.

Figure 12 - Pallet inspection “Best Case” process.



Inspection alternate cases.

- ◆ Cases obscured by plastic wrap.

Part of the process of verifying case labels may require removing some of the plastic wrap around the cases, potentially disturbing the pallet’s SSCC placard. FSIS included this instruction as part of FSIS Notice 62-20, under Section VI. Label Verification (FSIS 2020b), stating:

‘A. IPP are to perform label verification [...] **without removing the plastic wrapped around the pallet.** If IPP cannot perform the label verification because the plastic is covering information on the shipping containers, IPP are to request that official import inspection establishment management remove the plastic just enough for IPP to verify the information. This does not mean the plastic must be completely removed from the pallet. Pallets are to be rewrapped as needed.’ (FSIS 2020b)

However, if the placard is damaged and cannot be read, or it needs to be replaced as part of re-wrapping the pallet, import inspection warehouse management can use the Meat Messaging system to reprint an accurate label.

- ◆ Placard cannot be read by inspector and verified visually.

If the placard is damaged to the point where it cannot be read, either its barcode or the case label barcodes can be scanned instead, following these steps:

6. "Stage" the pallets for inspection.
 - Each pallet is lined up in a row next to each other.
 - a. Scan in consignment details.
 - b. Scan pallet SSCC placard on pallet to find consignment details on Meat Messaging. If it cannot be scanned, then the carton label barcode can be used instead.
7. Scan carton label barcode to retrieve consignment information.
8. Stamp placard. Once consignment details are confirmed, the pallet label is stamped with a US inspection mark.

Figure 13 - Scanning placard barcode at inspection.



Figure 15 - Search results details given on a consignment uploaded into the Meat Messaging

Last SSCC - 00093322180000220316								
Comp. prefix		Name		Est. no.		Contact		
9332218		Really Good Meats				John Smith		
Logistics information / Movement history:								
Date	Message ID	From country	Est no.	Move type	Status	To country	Group/ Pallet SSCC	Transport unit
202006081719	093322180000220316	AUSTRALIA	2784	Export	OPEN	UNITED STATES OF AMERICA	00893322180001787500	CN

Figure 15 shows a search result layout and type of information available through the Meat Messaging industry portal. All this information can be automatically retrieved by an I-house's internal information system through contact with the Meat Messaging system. The SSCC is scanned, and the associated information that can be seen in Figure 13 is linked with it, along with a report of all the cases, called the "All Carton Serial Number Report". An example from Teys has been linked to below (Meat Messaging n.d.a).

Authorised users can also update the pallet's

Figure 14 - Stamped pallet placard after inspection



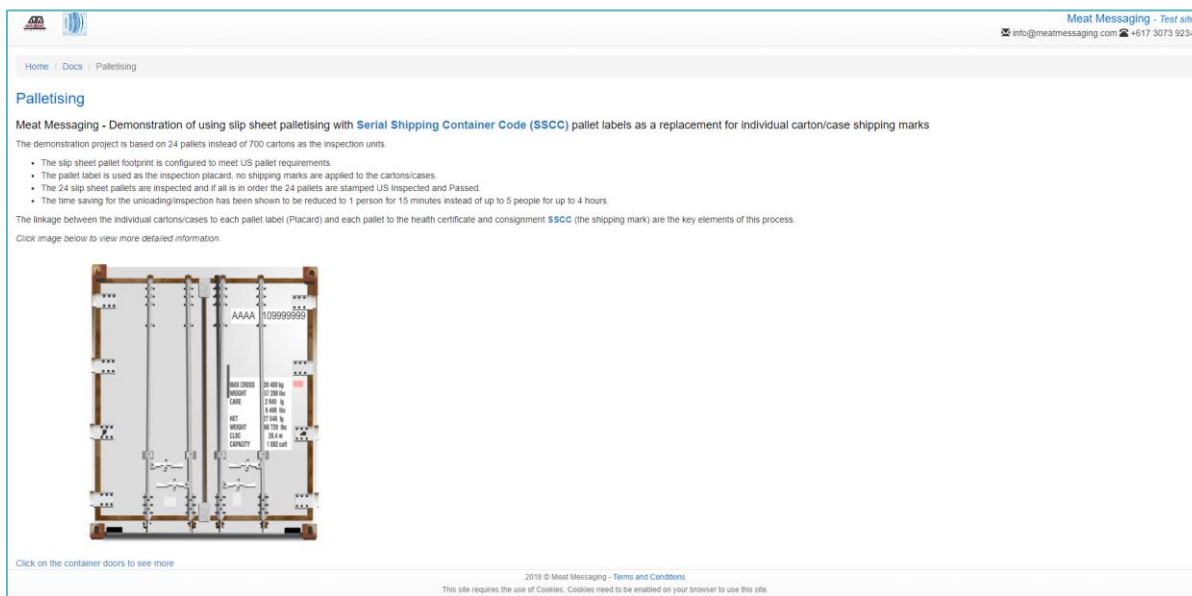
SSCC information to reflect changes to the pallet, such as number of cases after some have been removed for inspection.

The Meat Messaging-linked, SSCC placard also provides space for an inspection stamp once it has passed inspection. Figure 14 shows a pallet that passed inspection as part of the pallet pilot trial.

5.3.3. Training Material

The primary material was the interactive training tool created by Meat Messaging, and published on their website, available publicly on the “Palletising” web page (Meat Messaging n.d.d). This tool allows users to explore each aspect of the pallet protocol. Users begin on the page seen in Figure 16, and can click sections of the pallet to find out more information.

Figure 16 - Screenshot of the interactive pallet protocol training tool, Palletising.



As an example, clicking on the pallet in Figure 16 will take you to the next page, as shown in Figure 17. This section covers the pallet requirements, including the SSCC label and slip sheets, and a copy of the All Carton Serial Report.

Either the pallets or the report can be clicked on to give more in-depth information and examples. The tool follows this format all the way through to explain even the carton label components.

Videos were also recorded during the beginning of the pilot, documenting the following processes:

- ◆ Export loading (Meat Messaging 2020c).
- ◆ Import unloading and pallet inspection processes (Meat Messaging 2021a).
- ◆ Using a roller fork as an alternate tool for unloading pallets (Meat Messaging 2020a).

These videos were published on the Meat Messaging YouTube page (Meat Messaging, 2020a, 2020c, 2021a).

Other material created by Meat Messaging included industry circulars. These were published on the *Help and Documentation* page and circulated through the Meat Messaging LinkedIn page and by AMIC in their email newsletter (Meat Messaging, 2020b, 2021b, n.d.b).

Figure 17. Screenshot of the Palletising interactive training tool, explaining SSCC labels.

The screenshot displays a web-based training tool for Meat Messaging. It includes a navigation menu (Home / Docs / Palletising / Open) and a title bar for 'Meat Messaging - Test site'. The main content area is titled 'Meat Messaging - Demonstration of using slip sheet palletising with Serial Shipping Container Code (SSCC) pallet label'. It lists nine components of a Meat Messaging consignment report:

1. Consignment **SSCC** (AKA shipment, **SSCC**, message **SSCC**).
2. Health Certificate number (AKA foreign certificate number).
3. Foreign establishment number (AKA Establishment number, est number, plant number, packed by).
4. Count of pallets.
5. Count of individual units (cartons/cases).
6. Total net weight.
7. Shipping mark (AKA port mark) made up of 3 Letters representing the foreign establishment number and 9 digits that are the last 9 digits from the consignment SSCC.
8. Each of the 24 pallet label **SSCC**.
9. For each of the pallet labels the individual carton GTINs/ barcodes. (AKA identifying mark)

Below the list is an image of a shipping container with a blue 'SSCC' label on the door. To the right is a detailed report for SSCC 993487310070933932:

NOTE 1 SSCC 993487310070933932		All Carton Serial Number Report		NOTE 5
Exporter / Consignor Really Good Meats Company Pty Ltd 1 Slaughter Road SLAUGHTERVILLE QLD 9999 AU		Carton Count	700	
Consignee Meat Importing Company 1111 Import Road Importville NJ 00584 US		Message File Name	993487310070933932	
Buyer My Meat Buyer 1 Meat Market Road Marketville NY 5555 US		Message Date	20181210	
Third Party/ Loading Establishment My Third Party Cold 100 Cold Street Townsville		Container Number	AAAA109999999	
		Gov. Seal No.	99889988	
		Carrier Seal No.	ABC123456	
		Consigner Seal No.	NOTE 2 49999991	
		Health Certificate	EXDDC No.	3999991
		Goods Decl. (ECN)	9999991	
		Bill of Lading	29999991	
		Invoice No.	59999991	
		Order No. (purchase)	69999991	
		Species	BOVINE	
		Country of Origin	AUSTRALIA	
		NOTE 3	Establishment No.	

At the bottom, there is a footer with the URL 'https://www.meatmessaging.info/docs/993487310070933932_Serial_b.pdf' and a note: '2018 © Meat Messaging - Terms and Conditions. This site requires the use of Cookies. Cookies need to be enabled on your browser to use this site.'

The FSIS have also updated information on when the barcodes can be used. These include the pilot details covered by the FSIS Notice 62-20, issued in mid-2020, which updated the now expired FSIS Notice 37-19 (FSIS 2020b), and the requirements detailed under Directive 9900.5 Rev 1 (FSIS 2020a).

All the training information created by Meat Messaging and information covered by FSIS releases, was covered during information sessions held in 2020 and 2021.

5.3.4. Information Sessions

Two webinars were held since Milestone 2, outlining the new port marking system accepted by the FSIS.

The first was held in July 2020, as part of the NAMI Summer Learning event, hosted by NAMI, and presented by NAMI, MFT, GS1 US and MICA. It was targeted towards import houses and end users in the U.S., such as those in the food processing and value chain areas. Sixty-five people from 40 organisations across seven countries attended. It covered an overview of the supply chain, how the GS1 system works, and detailed the FSIS Directive 9900.5 and Notice 37-19.

It is important to note that since this webinar was given, the FSIS Notice 37-19 has expired and been replaced by FSIS Notice 62-20. Recordings of the webinar, along with the presentation document, can both be found on the Meat Messaging and NAMI websites (Meat Messaging n.d.c; NAMI n.d.).

The second webinar was held on 3rd March 2021, hosted by AMPC, and presented by representatives from MFT and AMIC. It was targeted towards companies involved in the Australian-U.S. red meat supply chain and was attended by 75 people across 44 companies from both Australia and the United States.

The presentation covered much of the same information as the NAMI webinar, and addressed more technical and operational issues around the Meat Messaging portal, data privacy and security concerns for the Meat Messaging portal and provided details around the FSIS Notice 62-20.

Recording of the webinar can be found on the AMPC YouTube page and Meat Messaging's *Help and Documentation* page (AMPC 2021; Meat Messaging, n.d.b). The Meat Messaging site also hosts a copy of the PowerPoint presentation (Meat Messaging n.d.c).

5.3.5. Compliance issues

Damage to cases during loading.

While this issue was covered in Milestone 2, there has been more material collected on the issue that can be covered.

Figure 18 - Cartons damaged by forklift picking up pallet stacked on top of them.



Upon the final shipment of the latest pallet pilot, three boxes were rejected from the shipment because the top of the boxes were ripped from the “teeth” of the forklift by human error.

The images shown in Figure 18 are from the pallet pilot and show the damage that can be done without having a slip sheet on the top of the crate. Pallets must have slip sheets placed on the top and bottom of the pallet (see Section 5.3.1).

Care also needs to be placed on the pallets when loading them, ensuring the sides of the stacked pallets are even with each other. The pallets plastic wrap will help them both maintain an even side and provide a protective layer around the cases.

Prior instances of damage to a pallet's plastic wrap were also documented earlier in the trial. It was determined that these were the result of QA practices before loading onto the shipping containers. Exporters have been advised to not remove the plastic wrap from the crate to take photos of the load. This will end up causing damage to the outer placard, making it difficult for the importing country to scan the consignment details (Figure 19).

Figure 19 Images of pallet wrap being torn off, damaging SSCC placards.



Smeared stamp ink

The placards from a shipment to the US in August shows the stamps had been smeared off (see Figure 20). When the pallet displayed for inspection, the stamp may have been touched before it could dry causing it to smudge.

During the trial, placard materials that were not suitable for stamp ink had a label added onto the inspection stamp field, with the stamp then placed on top of the label. However, these are temporary measures that increase the time it takes to inspect.

Ultimately, the ink used from the stamp is not suitable for the placards materials and is causing it to be smeared off in the handling process. Alternatively, the type of placard stamp may need to be changed to a print that is less glossy.

A temporary solution is to place a label made of the appropriate material to match the stamp ink on top of the inspection field (Figure 21).

However, it is better to use printing placards that do not have a glossy finish. This material does not allow the stamp to dry properly, especially in colder environments.

In addition, the stamps used for certification need to have ink that is suitable for non-porous surfaces. Solvent ink pads are one solution. They do not require re-inking the stamp pad between uses, has a low odour, and is archival and acid free.

They can be used for non-porous surfaces, including glass, metal, shrink plastic, laminated paper, cellophane, aluminium foil, leather & acrylic.

Understanding projects' concept

There is a concern that some key organisations on the U.S. side of the project do not fully understand the project, or its importance.

Comments were sought from both exporters and import establishment staff following each consignment. There was concern that sufficient training had not been delivered to USDA staff involved in the project, following incorrect actions taken on a previous shipment. However, the number of serious issues disappeared for exporters and import establishment staff after the third consignment.

Figure 20 - Smeared US inspection stamp.



Figure 21 - Label placed over placard field allowed it to be stamped.



There are also anecdotal reports that import establishments might still be struggling with both the initial concept (i.e., using a barcode to retrieve important information when the placard or case label cannot be read), and with the portal. More training could help mitigate these issues. However, there is no indication as to what type of training the staff would need.

Another method to consider is to allow comments for end users about how they found the process, as well as survey questions that target or test the project partners understanding of the barcode solution and the portal.

There is also a concern that both exporters in Australia and importers in the U.S. are not timing the release of information efficiently. For example, some exporters may be able to access certificate information on their shipments up to 30 days before they export. The impact of this has not been fully explored by the U.S.-based partners.

5.4 Proposed future for the project.

On the 15th May 2021, the project management group met with FSIS to discuss the acceptance of the pallet label protocol and publishing into an FSIS Directive. The projects success has been agreed upon, but it was acknowledged that drafted changes to Directive 9900.5 would be completed in the future.

In the interim, an ongoing process by which Australian Exporters can adopt the protocol has been drafted. This will allow the Australian Export industry to transition into the protocol with a clear, formalised process that is controlled by the Department of Agriculture and the FSIS.

In its current form, it is being implemented in a limited scope that is consistent with the pilot outcomes. The exporter would need to be GS1-compliant, and the protocol would be limited to consignments consisting of a single product type.

This not only will expand the pilot protocol to other exporters, but expands the scope of the product, so long as it is the only product type in a shipped container.

6.0 Discussion

There were two main drivers for this project. The first was the level of wasted product exported to the US because of non-compliant shipping marks. The second was the upcoming cancellation of the remarking services that the Australian Government and MLA had been providing at US Import Inspection facilities.

The outcomes from this project open an avenue through which Australian Exporters can resolve consignment rejections resulting from failed Certification inspections that will be lacking once the remarking services cease.

6.1 Compliance monitoring

Site visits and communication between DAWE, FSIS and the staff at the Export and Import facilities were crucial. The following instances were uncovered from these communications:

- ◆ Export QA processes were damaging marks before being sent out.
- ◆ Incorrect shipping marks were stemming from manual data entry.
- ◆ There was a greater need than anticipated to inform both export and import staff on:
 - ✎ How to use the web portal to submit and retrieve information.
 - ✎ Requirements to protect the pallets.
- ◆ Some exporters were using labels or ink on the labels that were not appropriate for frozen goods, leading to damaged labels or labels falling off.

All of these issues were managed and resolved over the course of the project.

6.2 Compliance reports

There was a discrepancy between the dates that a shipment arrived and was inspected at an inspection facility, and the time that it was reported back to the project management group. This meant that by the time Milestone 2 report was delivered, the 12 of the 14 consignments had been processed, but not reported back.

6.3 Delays and Changes to participants in the pilot.

The flow on effects of COVID-19 restrictions meant that the total number of proposed supply chain combinations were unable to be tested. This was a mix of some companies (export, import and customer) unable to organise an arrangement between each other, while others underwent changes in management or went out of business partway through the project.

Changes in import inspection facilities details have also led to the delay of two additional consignments that were planned for 2021.

Despite these issues, the supply chains that were tested were successful at implementing the pilot protocol.

6.4 Training Material

The pilot uncovered unanticipated technical and operational requirements. These included label materials, slip sheet provisions to protect labels and cartons, specific loading equipment to facilitate the slip sheet pallets. These requirements, and the issues that led to uncovering them, are detailed in the Milestone 3 report.

Additional Milestone 3 objectives included providing training materials and holding information sessions on the barcode protocol.

Training materials were provided through the Meat Messaging web portal, breaking down the details around the container, pallet and case/carton labelling and packing requirements, and how each can be submitted and found through the Meat Messaging portal.

Two information sessions were held, the first held in July 2020 and the second in March 2021. The first session focused on the pilot programme, detailing the GS1 system underpinning the technical side of the project, and explaining changes in FSIS Directive 9900.5 and Notice 37-19. The second added topics around the Meat Messaging portal, including data privacy and security concerns.

7.0 Recommendations

The pilot protocol has proved to be successful, despite only a limited number of the original participants able to organise consignments before its end.

The project management group is proposing that the DAWE and FSIS should oversee Australian Exporters added into the list of companies able to use the protocol, following both organisations to accept the proposed process.

The protocol should also be expanded to include additional product types, provided only a single product type is on a container in a shipped consignment.

8.0 Bibliography

FSIS (Food Safety and Inspection Service) (2020a) *Label Verification of Imported Meat, Poultry, and Egg Products*, FSIS Directive 9900.5, United States Department of Agriculture, United States Government, accessed 14 April 2020.

FSIS (2020b) FSIS Notice 62-20: Barcodes in Lieu of Shipping Marks Pilot Program for Fresh Meat Products from Australia, FSIS, USDA, United States Government, accessed 24 June 2021.

Meat Messaging (9 July 2020a) 'Using Roller Forks to Unload a Shipment in the US' [video], Meat Messaging, YouTube, accessed 19 April 2021. www.youtube.com/watch?v=vLEyOMpy3X8&ab_channel=MeatMessaging

— (September 2020b) *Meat Messaging app for Searching Cartons* [media release], Meat Messaging accessed 14 April 2021. www.meatmessaging.info/docs/MM_Industry_Circular_3_Search_App.pdf

— (25 November 2020c) 'Loading Meat for Export to the U.S. Using Slip Sheet Pallets and Meat Messaging' [video], Meat Messaging, YouTube, accessed 19 April 2021. www.youtube.com/watch?v=cEP0N8w0-iE&ab_channel=MeatMessaging

— (27 January 2021a) 'Unloading Meat Exporting to the U.S Using Slip Sheets and Meat Messaging' [video], Meat Messaging, YouTube, accessed 19 April 2021. www.youtube.com/watch?v=ujlv_XxplNU&ab_channel=MeatMessaging

— (February 2021b) 'The Meat Messaging search app is designed to scan the barcode...', Meat Messaging, accessed 14 April 2021. www.linkedin.com/posts/meatmessaging_searching-for-barcodes-using-meat-messaging-activity-6764343047670116352-iyKv

— (n.d.a) *All Carton Serial Report*, Meat Messaging, accessed 1 April 2021. www.meatmessaging.info/docs/993487310070933932_Serial_b.pdf

— (n.d.b) *Help and Documentation*, Meat Messaging, accessed 12 April 2021. www.meatmessaging.info/docs.asp

— (n.d.c) *Optimise Red Meat Import Process from Australia through Barcodes* [video], Meat Messaging, accessed 19 April 2021. www.meatmessaging.info/video/Optimize_Red_Meat_Import_Process_From_Australia_Through_Barcodes.html

— (n.d.d) *Palletising*, Meat Messaging, accessed 15 April 2021. www.meatmessaging.info/palletising.asp

NAMI (North American Meat Institute) (n.d.) *Optimize Red Meat Import Process from Australia through Barcodes* [video], NAMI, accessed 19 April 2021. www.meatinstitute.org/ht/display/ShowPage/id/173640/pid/173640

9.0 Appendices

- ◆ AMPC 2019-1004
- ◆ FSIS Directive 9900.5
- ◆ FSIS Notice 62-20 [appendix instead?]