





Meat Messaging

Implementation Guide

Prepared by: Des Bowler

Issue date: 31st July 2024





Table of Contents

1.	What is the Meat Messaging portal?	2
	1.1 What will you use Meat Messaging for?	2
2.	Implementation steps - Summary	5
	2.1 Implementation steps - Details	6
	Step 1. Register with Meat Messaging.	6
	Step 2. Work with your software vendor.	6
	Step 3. Registered with GS1 and using GS1 carton label and pallet labels.	8
	Step 4. Work practices to ensure information is available for sending to Meat Messaging	8
	Step 5. Work practices to ensure order picking, staging, scanning, port marking (or palletising), load documentation are correct.	
	Step 6. QA monitoring program and compliance to Approved Arrangements	9
	Step 7. Start using Meat Messaging on a testing or preliminary basis.	9
	Step 8. Updated Approved Arrangements and inclusion on the list of export establishments registe Meat Messaging.	
Ар	pendices	11
	Appendix I Palletising in Containers and Managing SSCC's	11
	Appendix II eMTC PDF representative example	13





1. What is the Meat Messaging portal?

The purpose of Meat Messaging is to provide an industry tool to meet the FSIS Directive 9900.5 Rev 1 for the use of the industry portal for carton/carcase verification and traceability, underpinned by GS1 barcodes and GS1 EANCOM Messaging. Meat Messaging also provides a tool to replace the manually prepared paper MTC process.

The Meat Messaging activities also include SSCC palletisation for export consignments to lower the cost of manual handling and lower the amount of product damage through logistics.

Meat Messaging is administered by AUS-MEAT with program management through a committee comprising industry representatives including AUS-MEAT, DAWE, AMPC, AMIC and MLA.

1.1 What will you use Meat Messaging for?

Meat Messaging is an industry portal used for the creation, sending, receiving, attestation statements and compliance declaration of meat products (carton, carcases, carcase portions, pallets, bulk packs and containers) GS1 EANCOM messages. In addition, the Meat Messaging system also serves as a replacement to the eMTC for interestablishment and domestication transports between one establishment to another.

These messages assist regulatory authorities with the authenticity, verification and traceability of meat products. The GS1 bar coding standards and GS1 EANCOM electronic message standards do not replace existing regulatory requirements, they assist and supplement these requirements.

- 1. Holding Export consignment information about the parties of the consignment, movement details, health certificate and the details on the product groups and the individual carton barcodes.
- 2. Holding eMTC (electronic Meat transfer Certificates) information (replacement of the paper MTC) about the movement of the export eligible product from one export registered establishment to another export registered establishment including the use of a digital signature and the attestation of the receipt of the product by the export registered establishment.
- 3. Holding details on the domestication of product that is leaving the export supply chain.

When considering meat messaging all 3 of the above activities need to be considered and included in implementation. For some export establishments all products are sent via eMTC for other export establishments only export consignments occur.

- 1. Export consignments
- 2. eMTC (replacement of the paper MTC)
- 3. Domestication of product that is leaving the export supply chain

NOTE: The process for communicating with Meat Messaging is the same for the three different activates, however the data is slightly different for each type.

For Export consignments the key information related to the business processes includes:

1. Detail for the Export				
A Type of Message = Export				
В	Date			
С	Establishment details			
D	Transport (e.g. Vessel and voyage)			
E	Port of loading			
F	Port of discharge			
G	Final destination			
Health certificate number				

Issue Date: 31st July 2024 Page 2 of 13





2. Details of the Product Groups and or Pallets					
А	Species				
В	Chilled of frozen				
С	Slaughter establishment(s)				
D	Slaughter dates				
E	Product establishments				
F	Product dates				
G	Count of carton				
H	Weight of carton				
1	Product endorsement				
J	Country eligibility				
K	Raising claims				
L	Processing claims				
M	Shipment mark				
N	Certificate of analysis and other supporting document references for the				
	group				

3.Individual Carton Barcodes			
A Full GTIN with Als including (01)			
В	CL content if application		

For eMTC consignments the key information related to the business processes including:

1. Detail for the eMTC:				
Type of Message = eMTC				
В	Date/ Time			
С	Journey details			
D	Transport detail (e.g. truck registration)			
E	Authorised Signatory and Digital Signature			
F	Port of discharge			
G	Attestation of receiving official			

2. Detail of the product groups and or pallets					
A Species					
В	Chilled of frozen				
C Slaughter establishment(s)					
D Slaughter dates					
E	Product establishments				
F	Product dates				
G	Kinds of Package				
Н	Count of carton				
1	Weight of carton				
J	Product endorsement				
Market and Country Endorsement Statement					
L Identifying Marks					

Issue Date: 31st July 2024 Page 3 of 13





3.Individual Carton Barcodes			
A Full GTIN with Als including (01)			
В	CL content if application		

For Domestication of product (leaving the export supply chain)

1. Detail for the Domestic:				
А	Type of Message = Domestic			
В	Date/Time			
С	Journey Details			
D Transport detail (e.g. truck registration)				
E	Customer/ Destination			

2. Detail for the Product Groups and or Pallets				
А	Species			
В	Chilled of Frozen			
С	Slaughter Establishment(S)			
D	Slaughter Dates			
E	Product Establishments			
F	Product Dates			
G	Kinds of Package			
Н	Count of Carton			
ı	Weight of Carton			

3.Individual Carton Barcodes				
А	Full GTIN with Als including (01)			

For full details on the message elements in a JSON format see https://meatmessaging.org/json_api_format.php

When eMTCs are created they made be sent to export registered establishment that are also using Meat Messaging. When this happens the eMTC can be completed fully electronically, including the Attestation.

When eMTCs are sent to a non-Meat Messaging export registered establishment a paper representation of MTC is required to be generated and accompany the consignment. The receiving export registered establishment must complete a manual Attestation and return the information toe the sending export registered establishment. The sending export registered establishment can then complete a self-Attestation that records that the receiving export registered establishment did receive the correct product intact.

Messages can be updated until they are marked as 'Sent' which indicates that the shipment has left. For export consignments that often occurs once the health certificate number is known and added to the message.

Messages that are marked as 'Sent' cannot be edited or updated. Messages that are marked as 'Sent' must be cancelled and a replacement message sent.

Issue Date: 31st July 2024 Page 4 of 13





2. Implementation steps - Summary.

The process to successfully start using the Meat Messaging industry portal will involve company QA, loadout, export documentation, IT and your production/ loadout/ export documentation system software vendor.

A number of implementation steps are required for export establishments to successfully start using Meat Messaging. These steps are summarised below:

- 1. Register with Meat Messaging (https://meatmessaging.org/register).
- 2. Work with your production system software vendor to ensure that they can interface with Meat Messaging.
- 3. Confirm your company is registered with GS1 and your carton labels (and if required pallet labels) comply with GS1 and Meat Messaging requirements. There is a requirement to send samples of carton label, pallet labels and photos of carton end panels to GS1 for testing. You will receive a test report for GS1 which forms part of your approval process. Where MTCs are required to move to eMTCs, ensure that the eMTC paper form is correct.
- 4. Review your work practices and production system software to ensure all the necessary export consignment information is available for exporting to Meat Messaging. The timing of sending the information to Meat Messaging is critical. For export consignments, the Health Certificate number should preferably be in the production system software BEFORE the information is sent to Meat Messaging. Where workflows of Establishments don't enable this, Health Certificate numbers can be added/uploaded to a consignment at a later time. Check that shipping marks match current work practices for cartons.
- 5. Review your work practices to ensure order picking, staging, scanning, port marking (or palletising), loadout and documentation are recording the correct information into your production system software for sending information to Meat Messaging.
- 6. Ensure that there is a QA monitoring program in place starting at the order preparation through to loadout, to create evidence of the correct cartons being loaded to orders and compliance to Approved Arrangements.
- 7. Start using Meat Messaging on a test or preliminary basis in parallel to current export documentation processes for sufficient time (or loads) to demonstrate multiple successful consignments. This involves following through to importing country import inspection and includes (eMTC).
- 8. Update the export establishments Approved Arrangements to include the use of Meat Messaging and apply to the Department of Agriculture for inclusion on the list of export establishments registered to use Meat Messaging.

Once all the above steps are completed, your establishment should be automatically sending all export consignments as well as meat transfers to Meat Messaging. There should be very minimal, if any, manual work required to use Meat Messaging after Meat Messaging is configured and operating automatically from the plant production system. All work should all be happening automatically through your production system software.

Please include your production system software vendor from the start of the Meat Messaging implementation process to ensure that all the technical requirements have been addressed.

Issue Date: 31st July 2024 Page 5 of 13





2.1 Implementation steps - Details

The following sections provide details on each of the implementation steps. Some sections are technical in nature and will require review by your production system software vendor.

There is help and support documentation available at: https://meatmessaging.org/documents

Step 1. Register with Meat Messaging.

To register with Meat Messaging go to: https://meatmessaging.org/register

You will need to know your GS1 Global Location Number (contact GS1 Australia www.gs1au.org to obtain this if you are unsure).

You will need one of your carton barcode numbers. This is shown on the registration page as a GS1 GTIN (Global Trade Item Number). This should be approximately 35 to 48 digits long.

For information on carton barcodes go to:

https://meatmessaging.org/docs/3_Carton_TechnicalFactSheetfinal.pdf

There is a need to set up a number of authorised company officials for use by your production system software as authorised officers that submit the information to Meat Messaging. Often these are the same as the company authorised officers that submit export documentation.

Step 2. Work with your software vendor.

You need to work with your software system vendor or vendors early in your implementation process. Specific information needs to be sent to Meat Messaging. If this information is not currently available in your production system or there is no workflow to access this information from your production system, this information won't sent to Meat Messaging.

The technical details on the information required to be sent is available at: https://meatmessaging.org/documents

i. Meat Messaging Interfacing / Communication

Some system vendors will either use automated emails to send the data to Meat Messaging or will use a data interface to communicate directly with Meat Messaging. Both models have advantages and disadvantages. Talk to your system vendor about the best option for your circumstances.

In general, the information includes:

- a. Type of consignment (e.g. Export, MTC, Date, Message ID)
- b. 'Consign from' details and contact details
- c. 'Consign to' detail and contact details
- d. Supplier details and contact details (if different from the 'Consigned from')
- e. Other notifiable parties (if required)
- f. Health Certificate number, RFP (for export consignments)
- g. Company order reference (such as Sales Order number, Invoice number, Customer Order number, etc)
- h. Transport details (for export consignments this might include ship and voyage, etc)
- i. Place/port of loading
- 1. Place/port of discharge
- j. Seal numbers, container number

Issue Date: 31st July 2024 Page 6 of 13





ii. Product Grouping

Products in a consignment are generally arranged in groups. This might be shipping mark groups, product code groups, pallet groups or any combination of commercial grouping. Each group is uniquely identified and the information is segregated into these groups when sent to Meat Messaging.

The information for products in a consignment can include:

- a. A group identifier such as a GS1 Serial Shipping Container Code (SSCC):
 - This is often a pallet or might just be a group of cartons of the same product with the same shipping mark.
- b. Shipping mark used for this group of cartons:

There can only be one shipping mark for a group. Whatever current process is used by the export establishment to create shipping marks is suitable for use with Meat Messaging. There is a proposal and pilot project to move away from the existing shipping marks per carton to the use of an SSCC as a shipping mark on wrapped slip sheet export pallets.

- c. Trade description as shown on a health certificate or MTC
- d. Global Trade Item Number (GTIN) for the product
- e. Handle statement e.g. Keep Frozen at -20 Degrees Celsius
- f. Species e.g. BOVINE
- g. Pack types e.g. Frozen Carton
- h. Number of carton or items
- i. Net weight for the group of cartons
- j. Kill date range and establishment/s
- k. Product date range and establishment/s
- I. Market eligibility statements (like on a MTC)
- m. Commercial raising and processing claims e.g. Certified Organic with a certification number, Halal with certification number, Grass feed, MSA graded, Certified Angus, etc.

Within a group, there are a number of like products. This is often cartons but could be carcase, bulk block or some other item type. This information at the item level can include:

- a. The full carton barcode number
- b. The CL value for the individual carton for trim cartons
- c. A production or boning room run number, or other traceability link code to the carton.

iii. Palletising in Containers and Managing SSCC

For the successful implementation of Meat Messaging, it's critical that any software developed supports the workflows or combination of workflows operating at Establishments. *Appendix I* provides a summary of the options for managing SSCC's in relation to palletising and containers and provides a high-level summary of an Establishment's requirements that production system software vendors need to address.

Issue Date: 31st July 2024 Page 7 of 13





Step 3. Registered with GS1 and using GS1 carton label and pallet labels.

The Meat Messaging system is based on the GS1 standards to ensure global compatibility for barcode scanning and understating consignment information.

The GS1 system is based on having globally unique company prefixes for barcodes so that they can be scanned anywhere in the world and the company that made (or has the authority for) the product can be readily identified. For this to work correctly, requires that all companies or brand owners that create carton barcodes are registered with GS1.

The second requirement to ensure global compatibility is that barcodes on cartons and pallets are correctly created and printed. To a large extent this the responsibility of your system vendor to ensure that barcodes comply with GS1 as well as the Meat Industry barcode guidelines.

For information of the GS1 standards go to: www.gs1au.org

For information on carton barcodes go to:

https://meatmessaging.org/docs/3_Carton_TechnicalFactSheetfinal.pdf

For detailed information of slip sheet export pallet labelling go to:

https://meatmessaging.org/palletising. Please ensure your production system software can generate the correct A4 sized pallet labels with the necessary information for export pallet labelling.

There is a requirement to send samples of carton labels, pallet labels and photos of carton end panels to GS1 for testing. A form is available at https://meatmessaging.org/documents for completion and inclusion with your submission to GS1 for testing.

After barcodes are tested, you will receive a test report from GS1 which forms part of your approval process.

Where the establishment uses MTCs, the production system software will need to be able to create, print and send eMTC forms based on the data related to MTCs. This is a replacement process to the current paper forms.

Step 4. Work practices to ensure information is available for sending to Meat Messaging

The information required for Meat Messaging is based on the import country requirements for consignment and product traceability and verification. This means that the required information needs to be recorded into your production system before the information is sent to Meat Messaging. You need to work with your production system software vendor to ensure that all the necessary information is correctly captured in a timely manner before sending to Meat Messaging. This also includes checking existing work practices related to accessing information such as Health Certificate numbers and ensuring that they are correctly entered as soon as they are available so the information can be sent to Meat Messaging.

The quality of data is critically important as incorrectly entered information may result in a consignment being rejected at time of inspection. You need to check work practices and workflows to ensure there are suitable QA activities in place.

Issue Date: 31st July 2024 Page 8 of 13





Step 5. Work practices to ensure order picking, staging, scanning, port marking (or palletising), loadout and documentation are correct.

Errors associated with incorrect shipping marks, incorrect product loading and incorrect consignment information being recorded result in a large number of import inspection failures every year.

As part of the Meat Messaging implementation process, a review of existing workflow and work practices are required to ensure that the processes are efficient as well as accurate. Many export establishments have identified operational deficiencies when they conduct this review process. Often the production system software vendor modifies their system to ensure that workflows and operational processes are coordinated and the required information is recorded within the software.

Step 6. QA monitoring program and compliance to Approved Arrangements.

QA monitoring processes are required to be in place with QA records sufficient to demonstrate that the order picking, staging, scanning, port marking (or palletising), loadout and documentation activities are under adequate process control. The QA records should be based on sampling plans that check all nominated consignments. There is a QA monitoring sampling plan calculator available in Meat Messaging.

QA monitoring processes must be accepted before the establishment is included on the Department of Agriculture list of export establishments registered to use Meat Messaging.

The establishment's Approved Arrangements should reflect the QA monitoring processes.

Step 7. Start using Meat Messaging on a testing or preliminary basis.

Meat Messaging supports a testing or preliminary usage model where export establishments start using Meat Messaging before inclusion on the Department of Agriculture list of Meat Messaging registered export establishments.

The export establishment may operate in this mode for several months to ensure all operational and system issues are all fully resolved and QA monitoring has been sufficient to ensure complete system accuracy.

Issues often become apparent that involve either modifications to workflows and/or modifications to production system software. These revisions are due to processes related to consignments or product details that were unknown when the implementation was commenced. You must ensure that your production system software vendor is aware that updates are likely to be required once production volumes of consignments and scenarios commence uploading to Meat Messaging.

During this stage, the Establishment often updates their Approved Arrangements and prepares the necessary QA monitoring procedures in readiness for submission to the Department of Agriculture.

At the end of this period of time there will be an expectation that all export consignments as well as MTCs are being routinely uploaded to Meat Messaging as consignments are finalised.

Issue Date: 31st July 2024 Page 9 of 13





Step 8. Updated Approved Arrangements and inclusion on the list of export establishments registered to use Meat Messaging.

On completion of the implementation steps above, the inclusion by the Department of Agriculture on the list of export establishments registered to use Meat Messaging will be formalised.

YOU MUST ensure that you have updated your approved arrangements to have the US Bar Coding Admin under the Country Listing in the certificate of Registration. DAWE in Canberra can't advise FSIS of anything until the certificate of registration has the necessary endorsement attached.

Please take into account which combinations you want to use and ensure your approved arrangements are implemented to suit your organisation.

Issue Date: 31st July 2024 Page 10 of 13





Appendices

Appendix I Palletising in Containers and Managing SSCC's

For the successful implementation of Meat Messaging, it's critical that any software developed supports the workflows or combination of workflows operating at Establishments. The purpose of an SSCC is to identify a logistics unit and the table below provides a summary of the options for managing SSCC's in relation to palletising and containers. The Table 1 table identifies and provides a high-level summary of an Establishment's requirements that production system software vendors need to address.

Table 1 Palletising/Container Workflow Options

Palletising/Container Workflow Options/Operations	Does your Establishment undertake this operation?
 A shipping container is filled with one product code and palletised for handling and NOT for product segregation. 	Yes / No
There is one Group (therefore one group SSCC) in Meat Messaging. Any pallet labels are not part of Meat Messaging as they are not for product segregation.	
A shipping container is filled with one product code and palletised for handling and ALSO for product segregation.	Yes / No
There is a Group for each pallet (and Group SSCC) in Meat Messaging. The pallet label is a Meat Messaging type pallet label and able to be used through logistics to end use as there in only one product code on each pallet.	
3. A shipping container is filled with different product codes and palletised for handling and NOT for product segregation. I.e. there are mixed product codes on the pallets.	Yes / No
There is one Group (therefore one Group SSCC) per product code in Meat Messaging. Any pallet labels are not part of Meat Messaging as they are not for product segregation as the pallet contains mixed product codes. At the inspection facility the pallets are broken down and re-palletised for US handling.	
4. A shipping container is filled with different product codes and palletised for handling and ALSO for product segregation. I.e. there is only one product code on a pallet.	Yes / No
There is one group for each pallet (therefore group SSCC) per product code in Meat Messaging. The pallet label is a Meat Messaging type pallet label and able to be used through logistics to end use as there in only one product type on the pallet.	
5. A physical pallet is made up of multiple layers where each layer is a Meat Messaging group with Meat Messaging pallet label.	Yes / No
This is a typical supermarket approach where the pallet is differentiated for the Product Code Group level pallet label. E.g. One physical pallet has 5 layers of 5 cartons. Each layer has been shrink wrapped with a Meat Messaging pallet label as all 5 cartons are the same product code. These 5 layers are then collectively shrink wrapped to create a single physical pallet.	

Issue Date: 31st July 2024 Page 11 of 13





Table 2 below provides a summary matrix of workflow options outlined in Table 1 above.

Table 2 Summary Matrix of Palletising/Container Workflow Options

Option	Shipping Container		Palletised for		Container SSCC	Pallet SSCC	Product Code SSCC
	One Product Code	Different Product Codes	Handling	Segregation			
1	Υ		Υ		One Group SSCC		
2	Υ		Y	Y		Group SSCC for each pallet	
3		Y	Υ				One Group SSCC per Product Code
4		Y	Υ	Y			One Group SSCC per Product Code per Pallet
5		Y	Y	Y (Layers within Pallet)			One Group SSCC per Product Code per layer on each Pallet

Issue Date: 31st July 2024 Page 12 of 13





Appendix II eMTC PDF representative example

Issue Date: 31st July 2024 Page 13 of 13