

Supply Chain Traceability

Beef

This document contains all existing information included in the Red Meat Supply Chain Committee; Beef Supply Chain Model available online at rmscc.org. The contents of this document are specific to the information flows as they occur throughout all aspects of the beef supply chain including Critical Tracking Events, Key Data Elements, Physical Inputs and Outputs as well as information relating to regulatory bodies and programs as well as traceability scenarios.

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1 Document Overview

This document is a printable version of the interactive Beef Supply Chain Model which can be found at <u>https://www.rmscc.org/supplychain.asp</u>. Supply Chain Traceability – Beef provides detailed information on the traceability in both the Australian domestic and export sectors of the supply chain including:

- An overview Red Meat Supply Chain Committee (RMSCC)
- An overview of the Australian red meat industry
- An introduction to supply chain traceability, Critical Tracking Events (CTEs) and Key Data Elements (KDEs)
- Descriptions of each stage of the beef supply chain, as well as visual diagrams, details of the physical and information inputs and outputs associated with each stage, key regulatory and industry programs, and detailed examples of supply chain traceability at each stage.

For more information regarding the RMSCC and related traceability projects, please visit <u>https://www.rmscc.org/</u>.

Version	Date	Summary of Changes	Contributors
0.1	24/08/2021	 Transcription of RMSCC webpages into document (sections 	Paige Mazoudier
		2,3,5.2,6).	Des Bowler
		• Writing of sections 2, 3, 4, 5.1.	
		Approval of final draft layout.	
0.2	26/08/2021	• Editing sections 2, 3, 5.1.	Ethan Ward
		Updated RMSCC web address.	
0.3	29/03/2022	Update for DFD	Fiona Gojan
0.4	19/08/2022	Update for DFD	Fiona Gojan

1.1 Document Version Control

2 Introduction to the RMSCC

The Red Meat Supply Chain Committee (RMSCC) is an industry-government steering committee focused on improving the information systems and processes that link or supply chain together.

The committees' activities include the codification of existing systems employed by business across the supply chain that identify and capture data. This area of focus is referred to as 'Supply Chain Information Standards'.

The goal of these activities is to provide an open, consist of language that each sector of the industry can use to communicate with each other.

The role of the RMSCC is to:

- Provide a path for reporting to the AMILSC on industry program and project activities related to information standards along the red meat supply chain.
- Provide a path for communication back to government and industry bodies on relevant supply chain information standards, projects, programs, and related activities.
- Provide harmonisation, coordination, and governance support to programs and projects on a voluntary basis. Support is provided only to those programs and projects that request them and only where the programs and projects activities relate to information standards along the red meat supply chain.

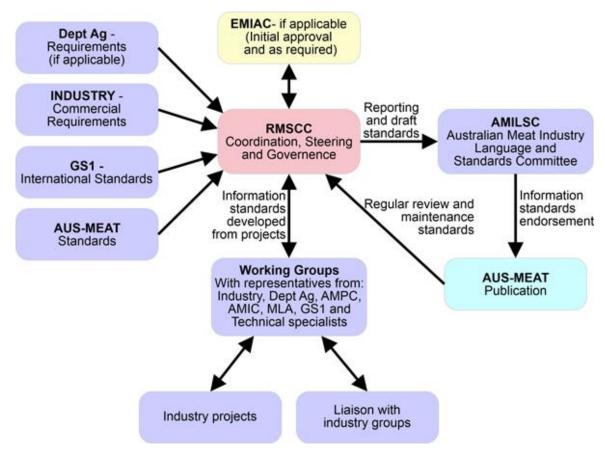


Figure 1. Red meat supply chain structure with respect to the publishing of industry standards.

3 The Red Meat Supply Chain

Supply Chain traceability and integrity have become the leading topics that underpin consumers, trading partners, and governments trust in Australia's 'clean and green' status.

With the release of the National Traceability Framework in 2019, the Australian Government have acknowledged that improvements to Australia's product integrity and traceability cannot solely come from government regulation.

There have been a growing number of supply chain standards specific to the red meat industry which have been imposed on industry by customers, key retailers, and global brands (e.g., BCR, McDonalds, Woolworths, Coles, Burger King, Costco). As a result, Australia's red meat supply chain is complex and understanding the regulatory and commercial requirements at each link in the chain is difficult to producers, processors, and retailers alike.

The term 'supply chain' is generally defined from a research or review perspective, viewing the supply chain collectively as system plus input and output. In the case of meat production and processing, this covers everything from the genetics and breed of livestock through to the product being bought or served to a consumer.

The importance of the supply chain and its 'links' is in ensuring customers and consumers of the product's integrity, security, and traceability. Despite these terms having their own specific meaning, each are commonly used interchangeably. At a basic consumer level, we are considering if the MSA graded, Grass-Fed, Eye Fillet from South-East Queensland advertised on the Norman Hotel menu for \$43.90 is exactly what it is advertised.

The RMSCC has taken this view of the final consumer and worked to map out the information-related requirements at each link in the chain that would deliver it. What has been created is a detailed map of Australia's livestock product supply chains.

The supply chains captured by the RMSCC include:

- Beef Supply Chain Model
- Small Stock (sheep, veal, and goat) Supply Chain Model
- Dairy Supply Chain Model

This document specifically refers to the Beef Supply Chain Model. For information regarding other supply chains please visit rmscc.org to download or view the interactive supply chain models.

4 Traceability in the Red Meat Supply Chain

4.1 What is traceability and its purpose?

As defined by the European Commission, traceability is 'the ability to trace and follow a food, feed, foodproducing animal or substance intended to be, or expected to be incorporated into a food or feed, through all stages of production, processing and distribution'. This is important for food and health and safety reasons, and requires that each animal, food, or substance can be traced back through all stages of production and processing. The systematic and logical management of information, and product identification will allow unsafe foods to be effectively and efficiently removed from the marketplace where required (EUR-Lex, 2002). In addition, there is increasing demand from consumers along the food supply chain for greater transparency of food products in relation to production, quality, health, ethics, and welfare as well as authenticity and sustainability of food and its sources. To enable this, each item is required to be adequately labelled and be accompanied by the relevant documentation in accordance with rules and regulations stipulated by exporting and importing countries (The Traceability Working Group., 2019). All food and food movements can be traced one step forwards and one step backwards at any point in the supply chain (Food Standards Australia & New Zealand., 2021).

Traceability can be broken down into two components:

- Internal traceability processes within an organisation link the identities of raw products to those of finished goods, with each new product having a Unique Product Identifier. This linkage is maintained between each product and its original ingredients. Each item produced within a batch is identified by a Lot Number which is maintained on the product until its depletion. This include where products are packaged within larger units.
- 2) External traceability each traceability partner or product handler/recipient along the supply chain can effectively trace each product back to its direct source and recipient. Here, not every member of the supply chain will have access to the entirety of the products traceability information but rather this data exists within the larger traceability system and will be available where required (Zhang & Bhatt, 2014)

4.2 What does traceability in the global beef supply chain look like?

Traceability throughout the red meat supply chain is integral to maintaining food safety and quality assurance. This allows the protection of Australia's reputation for producing clean, safe, and natural product, underpinning its standards for a high level of product integrity and international product demand.

An effective traceability system across a supply chain will include:

- The traceability of any item one step forward and one step backward at any point in the supply chain using a globally unique identifier
- The implementation and strict adherence to traceability processes and systems by all participants within the supply chain
- All necessary linkages between inputs and outputs of internal traceability systems are maintained (Zhang & Bhatt, 2014).

The Beef supply chain utilises the Meat Messaging system for the traceability of meat products across the supply chain from the slaughter of the animal. Prior to this, the National Livestock Identification program ensures the traceability of the live animal from birth to slaughter. The "Meat Messaging" system is based on the GS1 standards for numbering and barcoding of meat products and the GS1 EANCOM electronic message standards. Refer to the GS1 organisation in your country for details on the GS1 standards.

The "Meat Messaging" system is an online tool 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. These messages assist regulatory authorities with the authenticity, verification, and traceability of meat products. The GS1 barcoding standards and GS1 EANCOM electronic message standards do not replace existing regulatory requirements, they assist and supplement these requirements.

In an effort to improve food safety and traceability, the United States Food and Drug Administration (FDA) requires additional record keeping requirements (in addition to those existing within current regulations) for persons who manufacture, process, pack, or hold foods on the Food Traceability List (FTL). While these requirements only apply to those items on the FTL, the standards are designed to be implemented within all FDA-regulated supply chains. These additional records include the capturing of Key Data Elements (KDEs) and associated Critical Tracking Events (CTEs).

4.3 What are Critical Tracking Events?

Critical Tracking Events (CTEs) are activities in the supply chain that should be documented by the capture of key information (Key Data Elements i.e., KDEs) for each event to accurately trace product movement up or down the supply chain. In short, CTEs are those events whereby product is transported between premises, transformed into new products or depleted. Each of these CTE events involve inputs and outputs and thus subcategories can be created. These CTE categories and subcategories are defined in Figure 2 below.

CRITICAL TRACKING EVENT DEFINITIONS					
TRANSFORMATION-TYPE EVENTS events that typically support internal traceability within the four walls of a	TRANSFORMATION (T1) INPUT	An event where one or more materials are used to produce a traceable product that enters the supply chain. (NOTE: Materials used to produce products for immediate consumption by consumers are reported as Consumption events)			
supply chain company	TRANSFORMATION (T2) OUTPUT	An event where a created traceable product is packaged and labeled for entry into the supply chain.			
TRANSPORTATION-TYPE EVENTS events that typically support external	SHIPPING (S) EVENT	An event where traceable product is dispatched from a defined location to another defined location			
traceability between supply chain companies	RECEIVING (R) EVENT	An event where traceable product is received at a defined location from another defined location.			
DEPLETION-TYPE EVENTS	CONSUMPTION (C) EVENT	An event where a traceable product becomes available to consumers (Point-of-Sale or Prepared).			
events that capture how traceable product is removed from the supply chain	DISPOSAL (D) EVENT	An event where a traceable product is destroyed or discarded or otherwise handled in a manner that the product can no longer be used as a food ingredient or become available to consumers.			



Figure 3 below shows the common CTEs summarised by supply chain segment. It is important to note the process may change depending on the structure of the company, and its individual supply chain as well as the specific product output.

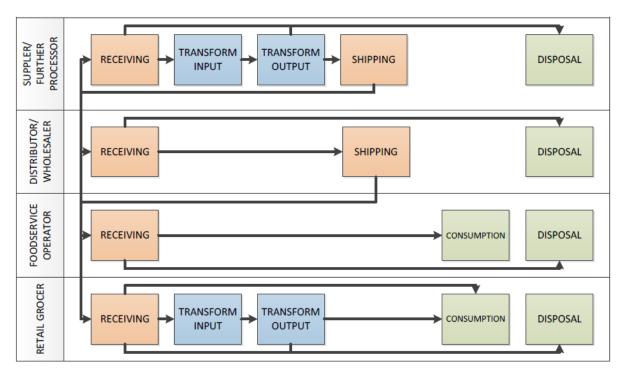


Figure 3. Common Critical Tracking Events (CTEs) in the Meat Supply Chain. Source: GS1US (2014).

Certain documents within the beef supply chain, particularly paper documents, will hold the key information of KDE associated with the traceability of the item at each CTE. These may include documents such as Delivery Dockets, Receipts of Purchase, Product Tickets, and other regulated documents and are transported with products as they move throughout the internal and external traceability systems of the supply chain. Where data is transferred electronically, the electronic system are considered the CTE related documentation.

4.4 What are Key Data Elements?

GS1 defines Key Data Elements (KDEs) as data elements associated with each critical tracking event which provide:

- 1) Essential information about time and place of the event, the party reporting the event, and the identification of the product involved; and
- 2) Related essential information about the transformation, transportation, or depletion from the supply chain of a traceable product.

KDEs associated with each Critical Tracking Event should allow the following five **W**'s to be determined:

- Who performed the activity,
- What product was involved,
- When was it done,
- Where was it done,
- **W**hy the event is reported.

Some key data elements are more essential than others for understanding the event. Required KDEs are consistently essential when reporting an event, such as event owner, location, and date and time, while other elements are best practice or conditional KDEs, depending on event circumstances or if data values are available for capture. The following KDEs for each CTE included in the meat supply chain are shown in Figure 4 below.

Koy Data Element	Tran	sport	Transfo	rmation	Deple	Depletion	
Key Data Element	Shipping	Receiving	Input	Output	Consumption	Disposal	
Event Type	R	R	R	R	R	R	
Event Owner	R	R	R	R	R	R	
Date	R	R	R	R	R	R	
Time	R	R	R	R	R	R	
Event Location	R	R	R	R	R	R	
Item ID Type	R	R	R	R	R	R	
Item ID	R	R	R	R	R	R	
Batch/Lot/Serial#	BP*	BP	R	R	BP	BP	
Quantity	R	R	R	R	R	R	
Unit of Measure	R	R	R	R	R	R	
Batch/Lot Relevant Date	C^	С	С	C^	BP	BP	
Activity Type	С	С	R	R			
Activity ID	С	С	R	R			
Supplier Identity	С	С	С	С			
Trading Partner Location	R	R					
R = Required Data							
C = Conditional Data; The need for this data would be determined by business circumstances;							
^ Relevant Date should be reported by Suppliers for Shipping Events and for Transformation Output events.							
BP = Best practice is to capture	e the batch/lot	number for tra	nsport and dep	pletion events	whenever pos	sible;	
nowever, if not feasible, Batch/Lot Relevant date or Activity ID must be provided							

however, if not feasible, Batch/Lot Relevant date or Activity ID must be provided.

* Batch/lot/serial numbers should be reported by Suppliers for Shipping events.

Figure 4. Use of Key Data Elements (KDEs) in Critical Tracking Events (CTEs). Source: GS1US (2014).

5 The Beef Supply Chain Model

5.1 Introduction

The beef supply chain is a highly complex value chain involving the transformation and transfer of a number of products throughout the various stages from breeding of the live animal, all the way through to purchase by the consumer. With this, there is an increasing requirement for the improved transparency and traceability of products and their information. Various stages of the supply chain and associated processes can be categorised into three larger sectors: the Exporting Country; International Trade; and the Importing Country. These stages can then be further divided into subcategories within these larger sectors such as Livestock, Processing and National Distribution for the Exporting Country sector of the supply chain. Each stage of the supply chain involves several Critical Tracking Events which may include the receival, transformation and dispatch of product to the next stage in the supply chain. With these, the transfer of data or Key Data Elements occurs through the transfer of physical documentation or electronic data transfer (Figure 5). Additionally, each stage of the supply chain is governed by a number of regulatory and industry bodies.

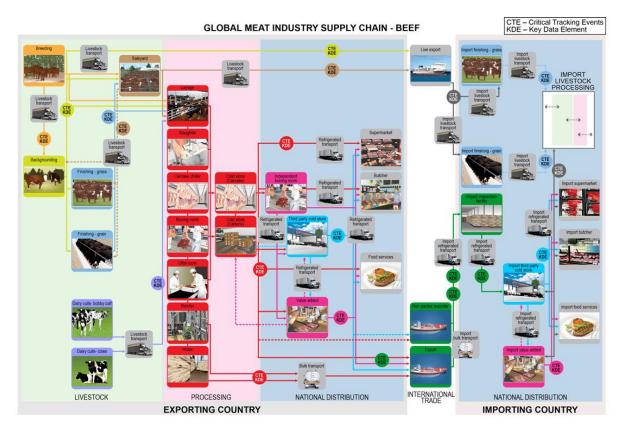


Figure 5. The global Beef Supply Chain Model

5.2 Supply Chain Sectors

5.2.1 Exporting Country - Livestock

5.2.1.1 Breeding

Breeding is the process in which animals are produced with a specific goal. These goals are critical to define in order to meet the needs of a producer for purchase. The market for which the animal is intended must be considered so that traits and characteristics of the animal can be accounted for in the breeding program. These characteristics might be the breed, growth rate or the fat depth of the animal.

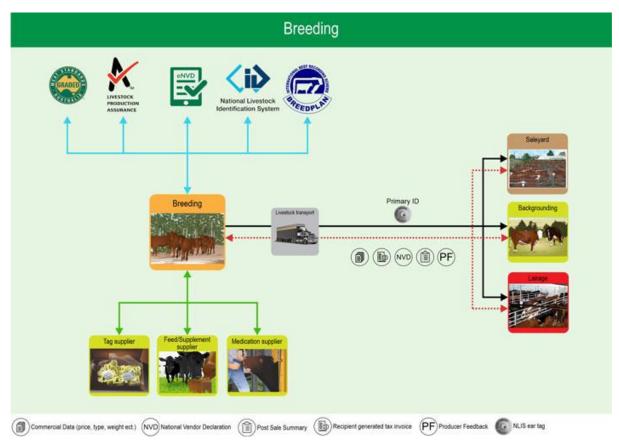


Figure 6. Inputs and outputs of the beef supply chain breeding sector.

5.2.1.1.1 Physical Inputs including Critical Tracking Events (CTEs)

There are a range of physical inputs to a cattle breeding enterprise depending on the breeding and management strategy. These inputs typically include breeding cattle and/or artificial breeding technologies, any feed supplements and veterinary drugs that may be administered and animal traceability tags. Information on all of these inputs must be recorded by the producer.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with inputs to the breeding system include the receival of:

- * Breeding cattle
- * Artificial breeding technology
- * Experts and veterinarians
- * Veterinary drugs or other health treatments
- * Feed supplies and supplements

- * Crop and pasture treatments
- * NLIS ID tags.

Table 1. Physical inputs and associated Critical Tracking Event	related documents for a beef breeding system.
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Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Breeding cattle	These are animals (bulls, cows/heifers) which have reached the appropriate age for breeding. Animals may be from a self- replacing herd or sourced from a seedstock breeder.	NVD, Commercial supply contract, Feed and water record, NLIS Movement Update, Receipt of purchase/Tax Invoice, State specific movement forms	
Artificial breeding technology	These are technologies such as artificial insemination or embryo transfer which are used in place of or in addition to traditional livestock breeding methods.	Commercial supply contract, Receipt of purchase/Tax Invoice	
Experts and veterinarians	These are professionals who provide services to the breeding enterprise which ensure the safety, wellbeing, and productivity of the livestock.	Receipt of purchase/Tax Invoice, Veterinary prescription	
Veterinary drugs or other health treatments	These may be prescribed, or non- prescribed treatments or medications given to ensure the health and wellbeing of the livestock.	Receipt of purchase/Tax Invoice, Veterinary prescription	For more information visit the Australian Pesticides and Veterinary Medicine Authority.
Feed supplies and supplements	These are supplementary animal feed products such as hay or silage fodder, or mineral supplements which are provided to ensure the production efficiency and health of livestock are maintained. This may also include clean drinking water e.g., where livestock are in transit or at saleyards.	Commodity Vendor Declaration (CVD), Receipt of purchase/Tax Invoice	

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Crop and pasture treatments	These are agricultural chemicals applied to crops, pastures and/or paddocks (inclusive of spot spraying) which livestock may come into contact with or consume.	Product label, Receipt of purchase/Tax Invoice	For more information visit the Australian Pesticides and Veterinary Medicine Authority.
NLIS ID tags	These are animal identification tags with a unique number which must be attached to animal moved off a PIC for traceability purposes.	NLIS Movement Update	For more information visit the Integrity systems website.

5.2.1.1.2 Information Inputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). There are a range of information inputs that are essential for the traceability of management practices, animal movements and treatments applied to the cattle in a breeding enterprise. It is essential that all of these inputs are recorded by the producer for auditing purposes.

Table 2. Information inputs, Key Data Elements and Critical Tracking Event related documentation for a beef breeding system.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Agreement date	This is the date on which an agreement between two parties was made.	Yes	Commercial supply contract	
APVMA approval number	This is a unique number allocated to each label by the APVMA.	Yes	Commodity Vendor Declaration, NVD, Product label	For more information visit the Australian Pesticides and Veterinary Medicine Authority.

Batch number	This is a unique number which identifies products sharing certain production characteristics and is used for traceability purposes.	Yes	Commodity Vendor Declaration, NVD, Product label	
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Feed and water record, Receipt of purchase/Tax Invoice	
Contract number	This is a unique number allocated to the contract by the seller.	Yes	Commercial supply contract, Commodity Vendor Declaration	
Date	This is the date of signing or of which a record entry or transaction was made.	Yes	Commercial supply contract, Commodity Vendor Declaration, Feed and water record, NVD, Receipt of purchase/Tax Invoice, State specific movement forms	
From PIC	The Property Identification Code from/to where the livestock or product were consigned.	Yes	Commodity Vendor Declaration, NLIS Movement Update, NVD, State specific movement forms	For more information visit the Integrity systems website.
Movement date	The date on which livestock or other products (e.g., feed or meat products) were transported between PICs/establishments.	Yes	Commercial supply contract, Commodity Vendor Declaration, NLIS Movement Update, NVD, State specific movement forms	
National Grower Registration Number	A unique number assigned to individuals registered with the National Grower Register, an online business register for Australian growers.	Yes	Commodity Vendor Declaration	
NLIS Tag Number/RFID	All animals transported between PICs must have a permanent National Livestock Identification System tag attached. This tag has a unique animal identification number.	Yes	NLIS Movement Update	For more information visit the Integrity systems website.
NVD Serial Number	Each NVD form has a unique serial number.	Yes	NLIS Movement Update, NVD	For more information

				visit the Integrity systems website.
Prescription number	A unique certificate number issued for traceability purposes.	Yes	Veterinary prescription	
Product code/description	This is a unique identifier or description assigned by the seller to each product type marketed or for sale.	Yes	Commodity Vendor Declaration, Commodity Vendor Declaration	
Recipient Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Feed and water record, Receipt of purchase/Tax Invoice	For more information visit the ATO website.
Seller/Supplier Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Feed and water record, Receipt of purchase/Tax Invoice	For more information visit the ATO website.
To PIC	The Property Identification Code from/to where the livestock or product were consigned.	Yes	Commodity Vendor Declaration, NLIS Movement Update, NVD, State specific movement forms	For more information visit the Integrity systems website.
Transport registration number	The registration number of the vehicle in which the animals or product were transported. For shipments of product this will be a shipping container number.	Yes	NVD	
Treatment date	The date on which a treatment or product was applied to a unit e.g., paddock, animal, fodder etc.	Yes	Commodity Vendor Declaration, Feed and water record, NVD	
Veterinary Registration Number	A unique number issued to veterinarians who are registered to practice, under the state legislative requirements, within the state in which they reside.	Yes	Veterinary prescription	

5.2.1.1.3 Physical Outputs including Critical Tracking Events (CTEs)

The physical outputs of a cattle breeding enterprise are calves to be sold on for beef production or retained for breeding. Other outputs may include cull cows or unwanted breeding stock.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with the outputs of the breeding system include the movement of:

- * Calves
- * Cull cattle

off the property, premises, or supply chain sector.

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Calves	These are young cattle to be raised for beef production and breeding.	NVD, Commercial supply contract, Feed and water record, MSA Declaration, NLIS Movement Update, Receipt of purchase/Tax Invoice, State specific movement forms	
Cull cattle	These are any unwanted livestock to be removed from the herd due to factors such as poor performance or age.	NVD, Commercial supply contract, Feed and water record, MSA Declaration, NLIS Movement Update, Receipt of purchase/Tax Invoice, State specific movement forms	

5.2.1.1.4 Information Outputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). Information outputs of the breeding enterprise include those that are related to enterprise productivity and animal traceability such as the movement date, NLIS ID number, PIC, and any health treatments or chemical exposure.

Table 4. Information outputs, Key Data Elements and Critical Tracking Event related documentation for a beef breeding system.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Agreement date	This is the date on which an agreement between two parties was made.	Yes	Commercial supply contract	

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
APVMA approval number	This is a unique number allocated to each label by the APVMA.	Yes	NVD	For more information visit the Australian Pesticides and Veterinary Medicine Authority.
Batch number	This is a unique number which identifies products sharing certain production characteristics and is used for traceability purposes.	Yes	NVD	
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Feed and water record, Receipt of purchase/Tax Invoice	
Contract number	This is a unique number allocated to the contract by the seller.	Yes	Commercial supply contract	
Date	This is the date of signing or of which a record entry or transaction was made.	Yes	Commercial supply contract, Feed and water record, MSA Declaration, NVD, Receipt of purchase/Tax Invoice, State specific movement forms	
From PIC	The Property Identification Code from/to where the livestock or product were consigned.	Yes	MSA Declaration, NLIS Movement Update, NVD, State specific movement forms	For more information visit the Integrity systems website.
Movement date	The date on which livestock or other products (e.g., feed or meat products) were transported between PICs/establishments.	Yes	Commercial supply contract, MSA Declaration, NLIS Movement Update, NVD, State specific movement forms	
MSA Declaration Serial Number	Each MSA Declaration form has a unique serial number.	Yes	MSA Declaration	For more information on

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
				MSA visit the MLA website.
MSA Licence Number	Any establishment consigning, supplying, or identifying MSA Certified Product must be registered and have a unique MSA Licence Number.	Yes	MSA Declaration, Receipt of purchase/Tax Invoice	For more information on MSA visit the MLA website.
NLIS Tag Number/RFID	All animals transported between PICs must have a permanent National Livestock Identification System tag attached. This tag has a unique animal identification number.	Yes	NLIS Movement Update	For more information visit the Integrity systems website.
NVD Serial Number	Each NVD form has a unique serial number.	Yes	NLIS Movement Update, NVD	For more information visit the Integrity systems website.
Producer/Vendor MSA Registration Number	Producers consigning cattle to MSA markets are required to be registered and have a unique MSA Registration Number.	Yes	MSA Declaration	For more information on MSA visit the MLA website.
Recipient Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Feed and water record, Receipt of purchase/Tax Invoice	For more information visit the ATO website.
Seller/Supplier Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Feed and water record, Receipt of purchase/Tax Invoice	For more information visit the ATO website.
To PIC	The Property Identification Code from/to where the livestock or product were consigned.	Yes	NLIS Movement Update, NVD, State specific movement forms	For more information visit the Integrity systems website.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Transport registration number	The registration number of the vehicle in which the animals or product were transported. For shipments of product this will be a shipping container number.	Yes	NVD	
Treatment date	The date on which a treatment or product was applied to a unit e.g., paddock, animal, fodder etc.	Yes	Feed and water record, NVD	
Movement time	This is the time at which cattle were moved from the property (PIC) of origin. Direct consignments travelling to processors by road must be slaughtered with 48 hours of dispatch.	Yes	MSA Declaration	

5.2.1.1.5 Regulatory and Industry Programs

- * Australian Registered Cattle Breeders Association (ARCBA)
- * BreedPlan
- * Cattle Council of Australia
- * eNVD
- * Livestock Production Assurance (LPA)
- * Meat Standards Australia (MSA)
- * National Livestock Identification System (NLIS)

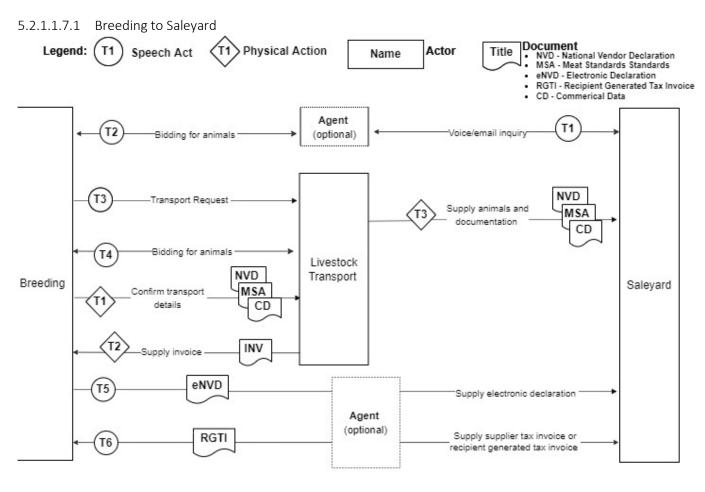
5.2.1.1.6 Supply Chain Node Traceability

The National Livestock Identification System (NLIS) is Australia's livestock traceability program which is administered by Integrity Systems Company (ISC). Where stipulated by State legislation and certain export markets, the NLIS system requires all animals bought, sold, and moved along the supply chain to be tagged with an accredited NLIS ID tag. Each tag has an NLIS tag number or Radio Frequency Identifier (RFID) for the traceability of the animal throughout its lifetime. Every property which holds livestock must have a Property Identification Code (PIC) to which the livestock are assigned in the NLIS Database. Each time livestock are transferred between PICs within Australia they must be accompanied by a livestock movement declaration, such as the National Vendor Declaration (NVD) form. This document typically outlines the transporter details, consignment details, compliance with intended market specifications, withholding periods, and the details of the new property PIC. All livestock movements between PICs require an NLIS movement update to be made by either or both the consigner and receiver. Where NLIS ID tags are lost livestock must be issued with a new post-breeder tag if not on the PIC of birth and this reconciled in the NLIS Database.

5.2.1.1.7 Data flow diagrams

Table E Data flow diagrams	for the inputs and	loutouts of a boo	f brooding system
Table 5. Data flow diagrams	joi the inputs und	oulpuis of a bee	j breeuniy system.

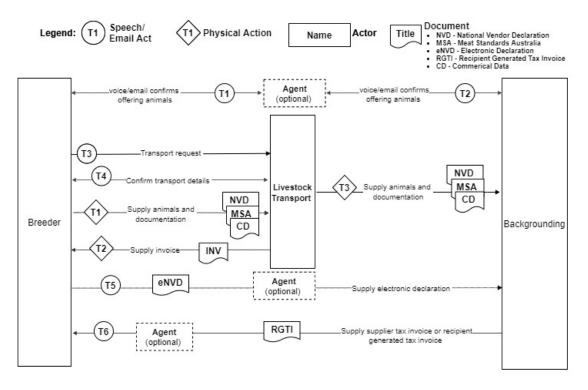
Direction	Description
Input	Breeding stock
Output	Breeding to Saleyard
Output	Breeding to Backgrounding
Output	Breeding to Lairage



Breeding to Saleyard

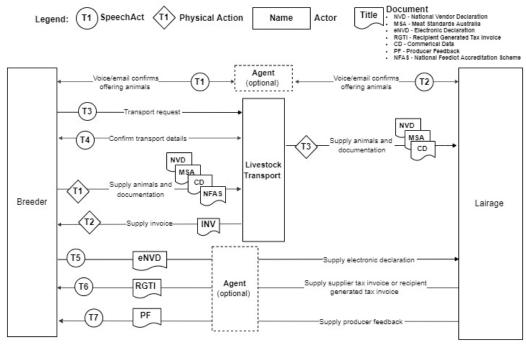
Figure 7. Data or information flows from the breeding to saleyard systems in the beef supply chain.

5.2.1.1.7.2 Breeding to Backgrounding



Breeding to Backgrounding

Figure 8. Data or information flows from the breeding to backgrounding systems in the beef supply chain.



5.2.1.1.7.3 Breeding to Lairage

Breeding to Lairage

Figure 9. Data or information flows from the breeding to lairage systems in the beef supply chain.

5.2.1.2 Backgrounding

Backgrounding allows livestock to grow to an appropriate weight and become acclimatised before entering feedlots or finishing systems. This process minimises the impact that moving can have on the livestock and can increase feed intake and decrease the risk of health issues. If the livestock do not feel comfortable and are not at ease they will not feed efficiently. This risk is increased when an animal is unfamiliar with feedlot feeding methods such as feed bunks. Additionally, backgrounding can allow the livestock to build a healthy immune response to potential low-level pathogens before being exposed to a larger number of animals and being at greater risk of infection. Furthermore, backgrounding allows for vaccinations to be administered to reduce the risk of spreading contagions.

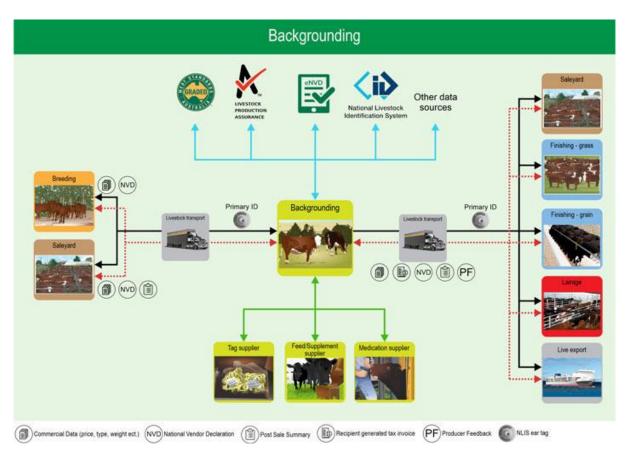


Figure 10. Inputs and outputs of the beef supply chain backgrounding sector.

5.2.1.2.1 Physical Inputs including Critical Tracking Events (CTEs)

There are a limited number of inputs to the backgrounding supply chain section. These generally include the livestock and any feed supplements and veterinary drugs that may be administered. Information on all of these inputs must be recorded by the producer.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with inputs to the backgrounding system include the receival of:

- * Calves
- * Experts and veterinarians
- * Veterinary drugs or other health treatments

- * Feed supplies and supplements
- * Crop and pasture treatments
- * NLIS ID tags.

Event related	Description of the inputs	Critical Tracking Event (CTE) related	More
to the inputs		documents (including electronic)	details
Calves	These are young cattle to be raised for beef production and breeding.	NVD, Commercial supply contract, Feed and water record, MSA Declaration, NFAS Agents Declaration, NFAS Delivery Docket or Form B, NLIS Movement Update, Post Sale Summary, Receipt of purchase/Tax Invoice, State specific movement forms	
Experts and	These are professionals who provide	Receipt of purchase/Tax Invoice,	
veterinarians	services to the breeding enterprise which ensure the safety, wellbeing, and productivity of the livestock.	Veterinary prescription	
Veterinary	These may be prescribed or non-prescribed	Receipt of purchase/Tax Invoice,	
drugs or other	treatments or medications given to ensure	Veterinary prescription	
health treatments	the health and wellbeing of the livestock.		
Feed supplies	These are supplementary animal feed	Commodity Vendor Declaration	
and	products such as hay or silage fodder, or	(CVD), Receipt of purchase/Tax	
supplements	mineral supplements which are provided to ensure the production efficiency and health of livestock are maintained. This may also include clean drinking water e.g., where livestock are in transit or at saleyards.	Invoice	
Crop and	These are agricultural chemicals applied to	Product label, Receipt of	
pasture treatments	crops, pastures and/or paddocks (inclusive of spot spraying) which livestock may come into contact with or consume.	purchase/Tax Invoice	
NLIS ID tags	These are animal identification tags with a unique number which must be attached to animal moved off a PIC for traceability purposes.	NLIS Movement Update	

Table 6. Physical inputs and associated Critical Tracking Event related documents for a beef backgrounding system.

5.2.1.2.2 Information Inputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). There are a range of measurements that are related to the inputs of backgrounding. These include the source of the cattle (PIC and ownership), transport details and any vaccinations or other treatments that the cattle have undergone. The general method for identifying individual cattle is through the NLIS device attached to the cattle. There is also likely to be a movement document such as a National Vendor Declaration (NVD) and/or Waybill.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Agreement date	This is the date on which an agreement between two parties was made.	Yes	Commercial supply contract	
APVMA approval number	This is a unique number allocated to each label by the APVMA.	Yes	Commodity Vendor Declaration, NVD, Product label	For more information visit the Australian Pesticides and Veterinary Medicine Authority.
Batch number	This is a unique number which identifies products sharing certain production characteristics and is used for traceability purposes.	Yes	Commodity Vendor Declaration, NVD, Product label	
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Feed and water record, Receipt of purchase/Tax Invoice	
Contract number	This is a unique number allocated to the contract by the seller.	Yes	Commercial supply contract, Commodity Vendor Declaration	
Date	This is the date of signing or of which a record entry or transaction was made.	Yes	Commercial supply contract, Commodity Vendor Declaration, Feed and water record, MSA Declaration, NFAS Agents Declaration, NFAS Delivery Docket or Form B, NVD, Post Sale Summary, Receipt of purchase/Tax Invoice, State specific movement forms	
From PIC	The Property Identification Code from/to where the livestock or product were consigned.	Yes	Commodity Vendor Declaration, MSA Declaration, NFAS Delivery Docket or Form B, NLIS Movement Update, NVD, Post Sale Summary, State specific movement forms	For more information visit the Integrity systems website.
Movement date	The date on which livestock or other products (e.g., feed or meat products) were transported between PICs/establishments.	Yes	Commercial supply contract, Commodity Vendor Declaration, MSA Declaration, NFAS Agents Declaration, NFAS Delivery Docket or Form B, NLIS Movement Update, NVD, State specific movement forms	
MSA Declaration Serial Number	Each MSA Declaration form has a unique serial number.	Yes	MSA Declaration	For more information on MSA visit the MLA website.
MSA Licence Number	Any establishment consigning, supplying, or identifying MSA Certified	Yes	MSA Declaration, Receipt of purchase/Tax Invoice	For more information on MSA visit

Table 7. Information inputs, Key Data Elements and Critical Tracking Event related documentation for a beef backgrounding system.

[Product must be registered			the MLA
	and have a unique MSA Licence Number.			website.
National Grower Registration Number	A unique number assigned to individuals registered with the National Grower Register, an online business register for Australian growers.	Yes	Commodity Vendor Declaration	
NFAS Accreditation Number	This is a unique number given to accredited feedlots certified under the National Feedlot Accreditation Scheme (NFAS).	Yes	NFAS Delivery Docket or Form B	For more information visit the AUS-MEAT website.
NFAS Delivery Docket Number	Each NFAS document has a unique number or identity code.	Yes	NFAS Agents Declaration	For more information visit the AUS-MEAT website.
NLIS Tag Number/RFID	All animals transported between PICs must have a permanent National Livestock Identification System tag attached. This tag has a unique animal identification number.	Yes	NLIS Movement Update	For more information visit the Integrity systems website.
NVD Serial Number	Each NVD form has a unique serial number.	Yes	NFAS Delivery Docket or Form B, NLIS Movement Update, NVD, Post Sale Summary	For more information visit the Integrity systems website.
Prescription number	A unique certificate number issued for traceability purposes.	Yes	Veterinary prescription	
Producer/Vendor MSA Registration Number	Producers consigning cattle to MSA markets are required to be registered and have a unique MSA Registration Number.	Yes	MSA Declaration	For more information on MSA visit the MLA website.
Product code/description	This is a unique identifier or description assigned by the seller to each product type marketed or for sale.	Yes	Commodity Vendor Declaration	
Quality Assurance Officer (QAO) Certificate Number	A unique number issued to personnel issued with a Statement of Authority for demonstrating skills for compliance with meeting NFAS Rules and Standards.	Yes	NFAS Delivery Docket or Form B	For more information visit the AUS-MEAT website.
Recipient Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Feed and water record, Receipt of purchase/Tax Invoice	For more information visit the ATO website.

Seller/Supplier Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Feed and water record, Receipt of purchase/Tax Invoice	For more information visit the ATO website.
To PIC	The Property Identification Code from/to where the livestock or product were consigned.	Yes	Commodity Vendor Declaration, NLIS Movement Update, NVD, Post Sale Summary, State specific movement forms	For more information visit the Integrity systems website.
Transport registration number	The registration number of the vehicle in which the animals or product were transported. For shipments of product this will be a shipping container number.	Yes	NVD	
Treatment date	The date on which a treatment or product was applied to a unit e.g., paddock, animal, fodder etc.	Yes	Commodity Vendor Declaration, Feed and water record, NVD	
Veterinary Registration Number	A unique number issued to veterinarians who are registered to practice, under the state legislative requirements, within the state in which they reside.	Yes	Veterinary prescription	
Movement time	This is the time at which cattle were moved from the property (PIC) of origin. Direct consignments travelling to processors by road must be slaughtered with 48 hours of dispatch.	Yes	MSA Declaration	

5.2.1.2.3 Physical Outputs including Critical Tracking Events (CTEs)

The outputs from backgrounding are cattle that have been prepared for finishing, moved to a saleyard for auction or sold/moved directly to a processor. There is information about each animal that should be made available to these next links in the supply chain. This information is normally passed forward on movement documents such as a National Vendor Declaration (NVD).

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with the outputs of the backgrounding system include the movement of:

* Cattle

off the property, premises, or supply chain sector.

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Cattle	These are bovine livestock and may include any type of cattle e.g., cull cattle, calves etc.	Commercial supply contract, Feed and water record, MSA Declaration, NLIS Movement Update, NVD, Receipt of purchase/Tax Invoice, State specific movement forms	

Table 8. Physical outputs and associated Critical Tracking Event related documents for a beef backgrounding system.

5.2.1.2.4 Information Outputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). The information outputs from backgrounding may include NLIS ID tag numbers, the Property Identification Code (PIC), Contract numbers and other information found Critical Tracking Event related documentation. Any details of treatments or vaccinations livestock have received (HGP, anthelmintics, etc.) will also be transferred to the next link in the supply chain.

Table 9. Information outputs, Key Data Elements and Critical Tracking Event related documentation for a beef breeding system.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Agreement date	This is the date on which an agreement between two parties was made.	Yes	Commercial supply contract	
APVMA approval number	This is a unique number allocated to each label by the APVMA.	Yes	NVD	For more information visit the Australian Pesticides and Veterinary Medicine Authority.
Batch number	This is a unique number which identifies products sharing certain production characteristics and is used for traceability purposes.	Yes	NVD	
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Feed and water record, Receipt of purchase/Tax Invoice	
Contract number	This is a unique number allocated to the contract by the seller.	Yes	Commercial supply contract	
Date	This is the date of signing or of which a record entry or transaction was made.	Yes	Commercial supply contract, Feed and water record, MSA Declaration, NVD, Receipt of purchase/Tax Invoice, State specific movement forms	
From PIC	The Property Identification Code from/to where the livestock or product were consigned.	Yes	MSA Declaration, NLIS Movement Update, NVD, State specific movement forms	For more information visit the Integrity systems website.

Movement data	The date on which livestock or	Yes	Commorcial supply	
Movement date	other products (e.g., feed or meat	res	Commercial supply contract, MSA	
	products) were transported		Declaration, NLIS	
	between PICs/establishments.		Movement Update, NVD,	
			State specific movement	
			forms	
MSA Declaration	Each MSA Declaration form has a	Yes	MSA Declaration	For more information on
Serial Number	unique serial number.			MSA visit the
MSA Licence	Any establishment consigning,	Yes	MSA Declaration, Receipt	MLA website. For more
Number	supplying, or identifying MSA	105	of purchase/Tax Invoice	information on
	Certified Product must be			MSA visit the
	registered and have a unique MSA			MLA website.
	Licence Number.			
NLIS Tag	All animals transported between	Yes	NLIS Movement Update	For more
Number/RFID	PICs must have a permanent			information visit
	National Livestock Identification			the Integrity systems
	System tag attached. This tag has a			website.
	unique animal identification			
	number.			
NVD Serial Number	Each NVD form has a unique serial	Yes	NLIS Movement Update	For more information visit
	number.			the Integrity
				systems
		Max		website.
NVD Serial Number	Each NVD form has a unique serial	Yes	NVD	For more information visit
	number.			the Integrity
				<u>systems</u> website.
Producer/Vendor	Producers consigning cattle to	Yes	MSA Declaration	For more
MSA Registration	MSA markets are required to be			information on MSA visit the
Number	registered and have a unique MSA			MLA website.
	Registration Number.			
Recipient Australian	This is an 11-digit registration	Yes	Feed and water record,	For more information visit
Business Number	number, issued by the Australian		Receipt of purchase/Tax	the ATO
(ABN)	Tax Office, used to identify		Invoice	website.
a. 11. /a. 11.	businesses.			F
Seller/Supplier	This is an 11-digit registration	Yes	Feed and water record,	For more information visit
Australian Business	number, issued by the Australian		Receipt of purchase/Tax	the ATO
Number (ABN)	Tax Office, used to identify		Invoice	website.
To PIC	businesses. The Property Identification Code	Yes	NLIS Movement Update,	For more
	from/to where the livestock or	162	NVD, State specific	information visit
	product were consigned.		movement forms	the Integrity
				systems website.
Transport	The registration number of the	Yes	NVD	
registration number	vehicle in which the animals or			
	product were transported. For			
	shipments of product this will be a			
	shipping container number.			
Treatment date	The date on which a treatment or	Yes	Feed and water record,	
	product was applied to a unit e.g.,		NVD	
	paddock, animal, fodder etc.			
Movement time	This is the time at which cattle	Yes	MSA Declaration	
	were moved from the property			

(PIC) of origin. Direct	
consignments travelling to	
processors by road must be	
slaughtered with 48 hours of	
dispatch.	

5.2.1.2.5 Regulatory and Industry Programs

The regulatory bodies that apply to cattle backgrounding are dependent on the intended market. Domestically, all livestock animals must have an NLIS ID, and any business holding livestock must have a PIC. To ensure livestock production meets the safety and ethical requirements set by domestic and export markets producers must be Livestock Production Assurance (LPA) accredited. If the cattle are expected to be used for meat products for export to the EU, then they must adhere to the European Union Cattle Accreditation Scheme (EUCAS). US exported meat and meat products must have records that comply with the US Quality System Assessment Program (US QAD).

- * Cattle Council of Australia
- * eNVD
- * Livestock Production Assurance (LPA)
- * Meat Standards Australia (MSA)
- * National Livestock Identification System (NLIS)
- * Other data sources

5.2.1.2.6 Supply Chain Node Traceability

The National Livestock Identification System (NLIS) is the Australian livestock traceability program which is administered by Integrity Systems Company (ISC). Where stipulated by State legislation and certain export markets, the NLIS system requires all animals bought, sold, and moved along the supply chain to be tagged with an accredited NLIS ID tag. Each tag has an NLIS tag number or Radio Frequency Identifier (RFID) for the traceability of the animal throughout its lifetime. Every property which holds livestock must have a Property Identification Code (PIC) to which the livestock are assigned in the NLIS Database. Each time livestock are transferred between PICs within Australia they must be accompanied by a livestock movement declaration, such as the National Vendor Declaration (NVD) form. This document typically outlines the transporter details, consignment details, compliance with intended market specifications, withholding periods, and the details of the new property PIC. All livestock movements between PICs require an NLIS movement update to be made by either or both the consigner and receiver. Where NLIS ID tags are lost livestock must be issued with a new post-breeder tag if not on the PIC of birth and this reconciled in the NLIS Database.

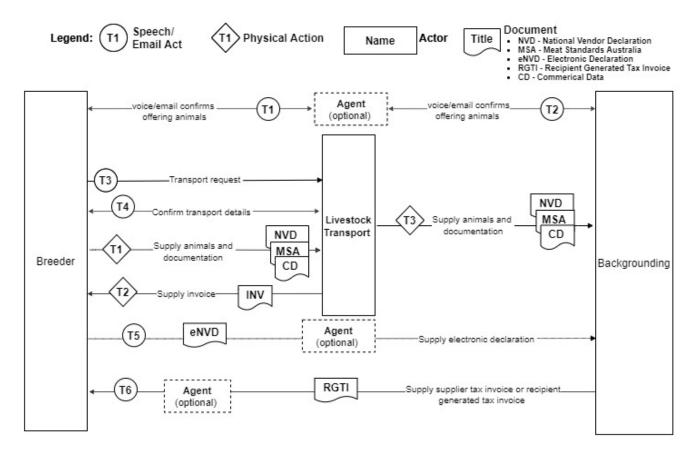
5.2.1.2.7 Data flow diagrams

Direction	Description
Input	Breeding to Backgrounding
Input	Saleyard to Backgrounding
Output	Backgrounding to Saleyard

Table 10. Data flow diagrams for the inputs and outputs of a beef backgrounding system.

Direction	Description
Output	Backgrounding to Finishing (grain or grass)
Output	Backgrounding to Lairage

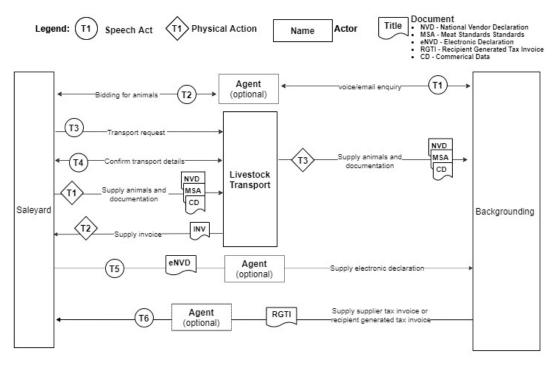
5.2.1.2.7.1 Breeding to Backgrounding



Breeding to Backgrounding

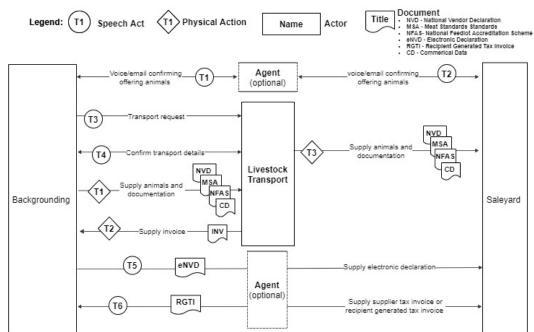
Figure 11. Data or information flows from the breeding to backgrounding systems in the beef supply chain.

5.2.1.2.7.2 Saleyard to Backgrounding



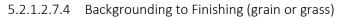
Saleyard to Backgrounding

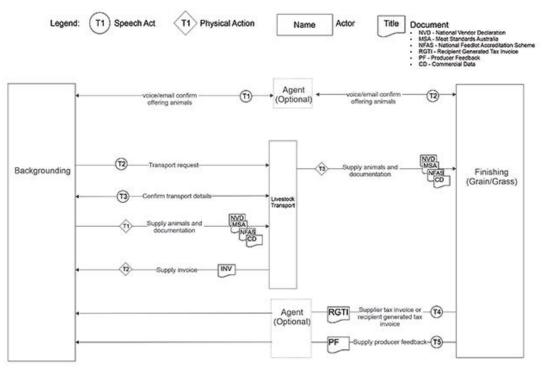
Figure 12. Data or information flows from the saleyard to backgrounding systems in the beef supply chain.



5.2.1.2.7.3 Backgrounding to Saleyard

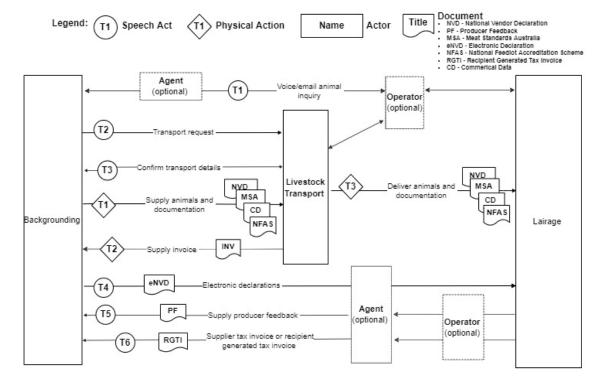
Backgrounding to Saleyard





Backgrounding to Finishing (Grain/Grass)

Figure 13. Data or information flows from the backgrounding to finishing (grain/grass) systems in the beef supply chain.



5.2.1.2.7.5 Backgrounding to Lairage

Backgrounding to Lairage

Figure 14. Data or information flows from the backgrounding to lairage systems in the beef supply chain.

5.2.1.3 Finishing – grass

Grass finished animals are those which are typically fed entirely on grass derived forage such as annual or perennial grasses, crops in the vegetative stage, hay, or silage. These animals are not fed a grain-based diet such as that provided in a feedlot system. The requirements of a grass-finishing system are usually determined by the target market. Grass finishing systems may also require feeding supplements for nutritional, efficiency and production purposes to be provided to livestock.

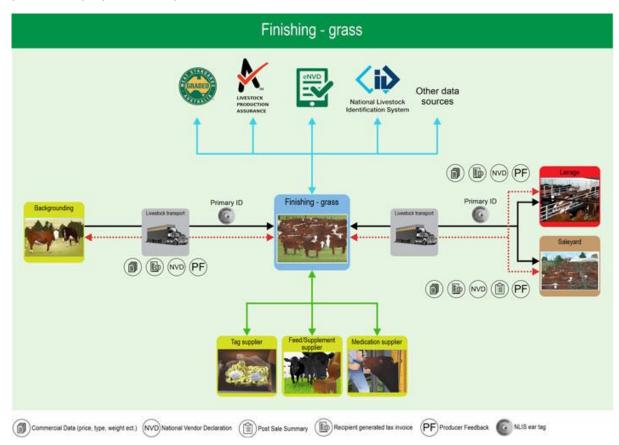


Figure 15. Inputs and outputs of the beef supply chain finishing-grass sector.

5.2.1.3.1 Physical Inputs including Critical Tracking Events (CTEs)

Inputs for the grass finishing component of the beef cattle supply chain are largely the same as for the previous components and include the cattle, any veterinary input or commercial services, veterinary drugs and health treatments, crop and pasture treatments and any feed supplements.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with inputs to the grass finishing system include the receival of:

- * Cattle
- * Experts and veterinarians
- * Veterinary drugs or other health treatments
- * Feed supplies and supplements
- * Crop and pasture treatments
- * NLIS ID tags.

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Cattle	These are bovine livestock and may include any type of cattle e.g., cull cattle, calves etc.	Commercial supply contract, Feed and water record, MSA Declaration, NLIS Movement Update, NVD, Receipt of purchase/Tax Invoice, State specific movement forms	
Experts and veterinarians	These are professionals who provide services to the breeding enterprise which ensure the safety, wellbeing, and productivity of the livestock.	Receipt of purchase/Tax Invoice, Veterinary prescription	
Veterinary drugs or other health treatments	These may be prescribed, or non-prescribed treatments or medications given to ensure the health and wellbeing of the livestock.	Receipt of purchase/Tax Invoice, Veterinary prescription	
Feed supplies and supplements	These are supplementary animal feed products such as hay or silage fodder, or mineral supplements which are provided to ensure the production efficiency and health of livestock are maintained. This may also include clean drinking water e.g. where livestock are in transit or at saleyards.	Commodity Vendor Declaration (CVD), Receipt of purchase/Tax Invoice	
Crop and pasture treatments	These are agricultural chemicals applied to crops, pastures and/or paddocks (inclusive of spot spraying) which livestock may come into contact with or consume.	Product label, Receipt of purchase/Tax Invoice	
NLIS ID tags	These are animal identification tags with a unique number which must be attached to animal moved off a PIC for traceability purposes.	NLIS Movement Update	

Table 11. Physical inputs and associated Critical Tracking Event related documents for a beef finishing-grass system.

5.2.1.3.2 Information Inputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). There are a range of measurements that are related to the inputs of a finishing system. These include the source of the cattle (PIC and ownership), transport details, any vaccinations, or other treatments that the cattle have undergone. The general method for identifying individual cattle is through the NLIS device attached to the cattle. There is also likely to be a movement document such as a National Vendor Declaration and/or Waybill.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Agreement date	This is the date on which an agreement between two parties was made.	Yes	Commercial supply contract	
APVMA approval number	This is a unique number allocated to each label by the APVMA.	Yes	Commodity Vendor Declaration, NVD, Product label	For more information visit the Australian Pesticides and

Table 12. Information inputs, Key Data Elements and Critical Tracking Event related documentation for a beef finishing-grass system.

				Veterinary Medicine Authority.
Batch number	This is a unique number which identifies products sharing certain production characteristics and is used for traceability purposes.	Yes	Commodity Vendor Declaration, NVD, Product label	
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Feed and water record, Receipt of purchase/Tax Invoice	
Contract number	This is a unique number allocated to the contract by the seller.	Yes	Commercial supply contract, Commodity Vendor Declaration	
Date	This is the date of signing or of which a record entry or transaction was made.	Yes	Commercial supply contract, Commodity Vendor Declaration, Feed and water record, MSA Declaration, NVD, Receipt of purchase/Tax Invoice, State specific movement forms	
From PIC	The Property Identification Code from/to where the livestock or product were consigned.	Yes	Commodity Vendor Declaration, MSA Declaration, NLIS Movement Update, NVD, State specific movement forms	For more information visit the Integrity systems website.
Movement date	The date on which livestock or other products (e.g., feed or meat products) were transported between PICs/establishments.	Yes	Commercial supply contract, Commodity Vendor Declaration, MSA Declaration, NLIS Movement Update, NVD, State specific movement forms	
MSA Declaration Serial Number	Each MSA Declaration form has a unique serial number.	Yes	MSA Declaration	For more information visit the Integrity systems website.
MSA Licence Number	Any establishment consigning, supplying, or identifying MSA Certified Product must be registered and have a unique MSA Licence Number.	Yes	MSA Declaration, Receipt of purchase/Tax Invoice	For more information on MSA visit the MLA website.
National Grower Registration Number	A unique number assigned to individuals registered with the National Grower Register, an online business register for Australian growers.	Yes	Commodity Vendor Declaration	
NLIS Tag Number/RFID	All animals transported between PICs must have a permanent National Livestock Identification System tag attached. This tag has a unique animal identification number.	Yes	NLIS Movement Update	For more information visit the Integrity systems website.
NVD Serial Number	Each NVD form has a unique serial number.	Yes	NLIS Movement Update, NVD	For more information visit the Integrity

				systems website.
Prescription number	A unique certificate number issued for traceability purposes.	Yes	Veterinary prescription	
Producer/Vendor MSA Registration Number	Producers consigning cattle to MSA markets are required to be registered and have a unique MSA Registration Number.	Yes	MSA Declaration	For more information on MSA visit the MLA website.
Product code/description	This is a unique identifier or description assigned by the seller to each product type marketed or for sale.	Yes	Commodity Vendor Declaration	
Recipient Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Feed and water record, Receipt of purchase/Tax Invoice	For more information visit the ATO website.
Seller/Supplier Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Feed and water record, Receipt of purchase/Tax Invoice	For more information visit the ATO website.
To PIC	The Property Identification Code from/to where the livestock or product were consigned.	Yes	Commodity Vendor Declaration, NLIS Movement Update, NVD, State specific movement forms	For more information visit the Integrity systems website.
Transport registration number	The registration number of the vehicle in which the animals or product were transported. For shipments of product this will be a shipping container number.	Yes	NVD	
Treatment date	The date on which a treatment or product was applied to a unit e.g., paddock, animal, fodder etc.	Yes	Commodity Vendor Declaration, Feed and water record, NVD	
Veterinary Registration Number	A unique number issued to veterinarians who are registered to practice, under the state legislative requirements, within the state in which they reside.	Yes	Veterinary prescription	
Movement time	This is the time at which cattle were moved from the property (PIC) of origin. Direct consignments travelling to processors by road must be slaughtered with 48 hours of dispatch.	Yes	MSA Declaration	

5.2.1.3.3 Physical Outputs including Critical Tracking Events (CTEs)

The outputs from a grass finishing system are cattle that have been prepared for slaughter and are either moved to a saleyard for auction or sold/moved directly to a processor. There is information about each animal that should be made available to these next links in the supply chain. This information is normally passed forward on movement documents such as a National Vendor Declaration. Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with the outputs of the grass finishing system include the movement of:

* Cattle

off the property, premises, or supply chain sector.

Table 13. Physical outputs and associated Critical Tracking Event related documents for a beef finishing-grass system.

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Cattle	These are bovine livestock and may include any type of cattle e.g., cull cattle, calves etc.	Commercial supply contract, Feed and water record, MSA Declaration, NLIS Movement Update, NVD, Receipt of purchase/Tax Invoice, State specific movement forms	

5.2.1.3.4 Information Outputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). Information passed forward to the next links in the supply chain from a grass finishing system largely include that as for the backgrounding system. Such information is derived from regulated documents such as the National Vendor Declaration and MSA Declaration. Other information may include that from Commercial Supply Contracts, State specific movement Forms and Receipts of purchase/Tax invoices.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Agreement date	This is the date on which an agreement between two parties was made.	Yes	Commercial supply contract	
APVMA approval number	This is a unique number allocated to each label by the APVMA.	Yes	NVD	
Batch number	This is a unique number which identifies products sharing certain production characteristics and is used for traceability purposes.	Yes	NVD	
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Feed and water record, Receipt of purchase/Tax Invoice	
Contract number	This is a unique number allocated to the contract by the seller.	Yes	Commercial supply contract	
Date	This is the date of signing or of which a record entry or transaction was made.	Yes	Commercial supply contract, Feed and water record, MSA Declaration, NVD, Receipt of	

Table 14. Information outputs, Key Data Elements and Critical Tracking Event related documentation for a beef finishing-grass system.

			purchase/Tax Invoice, State specific movement forms	
From PIC	The Property Identification Code from/to where the livestock or product were consigned.	Yes	MSA Declaration, NLIS Movement Update, NVD, State specific movement forms	For more information visit the Integrity systems website.
Movement date	The date on which livestock or other products (e.g., feed or meat products) were transported between PICs/establishments.	Yes	Commercial supply contract, MSA Declaration, NLIS Movement Update, NVD, State specific movement forms	
MSA Declaration Serial Number	Each MSA Declaration form has a unique serial number.	Yes	MSA Declaration	For more information on MSA visit the MLA website.
MSA Licence Number	Any establishment consigning, supplying, or identifying MSA Certified Product must be registered and have a unique MSA Licence Number.	Yes	MSA Declaration, Receipt of purchase/Tax Invoice	For more information on MSA visit the MLA website.
NLIS Tag Number/RFID	All animals transported between PICs must have a permanent National Livestock Identification System tag attached. This tag has a unique animal identification number.	Yes	NLIS Movement Update	For more information visit the Integrity systems website.
NVD Serial Number	Each NVD form has a unique serial number.	Yes	NLIS Movement Update, NVD	For more information visit the Integrity systems website.
Producer/Vendor MSA Registration Number	Producers consigning cattle to MSA markets are required to be registered and have a unique MSA Registration Number.	Yes	MSA Declaration	For more information on MSA visit the MLA website.
Recipient Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Feed and water record, Receipt of purchase/Tax Invoice	For more information visit the ATO website.
Seller/Supplier Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Feed and water record, Receipt of purchase/Tax Invoice	For more information visit the ATO website.
To PIC	The Property Identification Code from/to where the livestock or product were consigned.	Yes	NLIS Movement Update, NVD, State specific movement forms	For more information visit the Integrity systems website.
Transport registration number	The registration number of the vehicle in which the animals or product were transported. For shipments of product this will be a shipping container number.	Yes	NVD	

Treatment date	The date on which a treatment or product was applied to a unit e.g., paddock, animal, fodder etc.	Yes	Feed and water record, NVD	
Movement time	This is the time at which cattle were moved from the property (PIC) of origin. Direct consignments travelling to processors by road must be slaughtered with 48 hours of dispatch.	Yes	MSA Declaration	

5.2.1.3.5 Regulatory and Industry Programs

- * Cattle Council of Australia
- * eNVD
- * Livestock Production Assurance (LPA)
- * Meat Standards Australia (MSA)
- * National Livestock Identification System (NLIS)
- * Other data sources

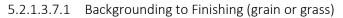
5.2.1.3.6 Supply Chain Node Traceability

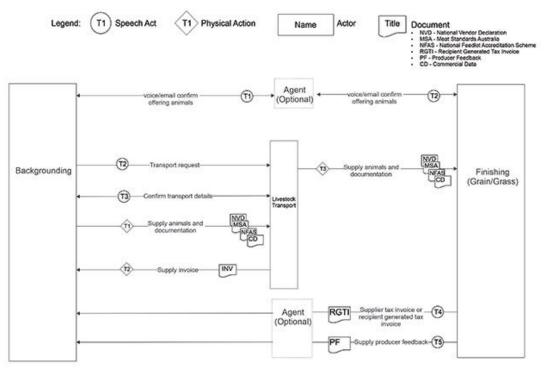
The National Livestock Identification System (NLIS) is the Australian livestock traceability program which is administered by Integrity Systems Company (ISC). Where stipulated by State legislation and certain export markets, the NLIS system requires all animals bought, sold, and moved along the supply chain to be tagged with an accredited NLIS ID tag. Each tag has an NLIS tag number or Radio Frequency Identifier (RFID) for the traceability of the animal throughout its lifetime. Every property which holds livestock must have a Property Identification Code (PIC) to which the livestock are assigned in the NLIS Database. Each time livestock are transferred between PICs within Australia they must be accompanied by a livestock movement declaration, such as the National Vendor Declaration (NVD) form. This document typically outlines the transporter details, consignment details, compliance with intended market specifications, withholding periods, and the details of the new property PIC. All livestock movements between PICs require an NLIS movement update to be made by either or both the consigner and receiver. Where NLIS ID tags are lost livestock must be issued with a new post-breeder tag if not on the PIC of birth and this reconciled in the NLIS Database.

5.2.1.3.7 Data flow diagrams

Direction	Description
Input	Backgrounding to Finishing (grain or grass)
Input	Saleyard to Finishing (grain or grass)
Output	Finishing - Grass to Saleyard
Output	Finishing - Grass to Lairage

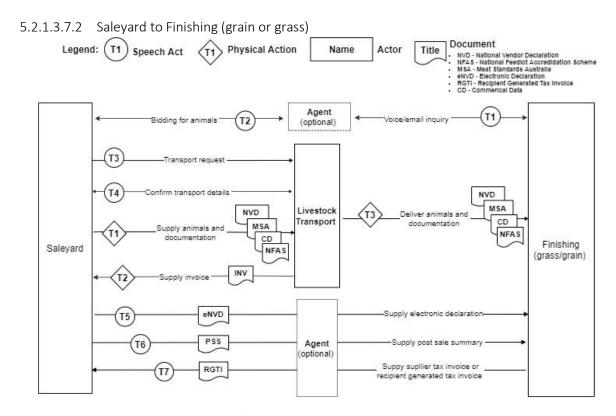
Table 15. Data flow diagrams for the inputs and outputs of a beef finishing-grass system.





Backgrounding to Finishing (Grain/Grass)

Figure 16. Data or information flows from the backgrounding to finishing (grain or grass) systems in the beef supply chain.



Saleyard to Finishing (grain/grass)

Figure 17. Data or information flows from the saleyard to finishing (grain or grass) systems in the beef supply chain.

5.2.1.3.7.3 Finishing - Grass to Saleyard

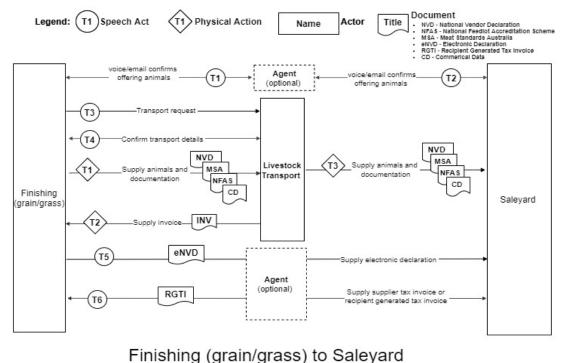
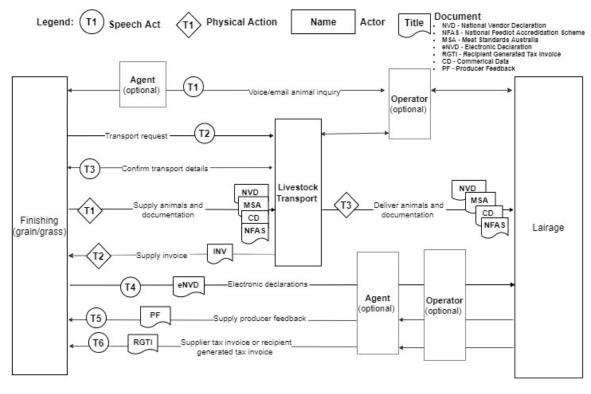


Figure 18. Data or information flows from the finishing (grain or grass) to saleyard systems in the beef supply chain.



5.2.1.3.7.4 Finishing - Grass to Lairage

Finishing (grain/grass) to Lairage

Figure 19. Data or information flows from the finishing (grain or grass) to lairage systems in the beef supply chain.

5.2.1.4 Finishing – grain

Grain finished animals are those which have been fed on a grain-based ration in a feedlot system. This system is typically comprised of several confined yard areas, with watering and feeding facilities, in which livestock are held. Grain rations are typically of higher quality than grass pasture and therefore improve the live weight gain of animals. Grain feeding systems typically produce product with greater eating quality, enable the specific needs of niche markets to be met and allow for a more consistent supply of fodder to meet the energy demands of the growing animal.

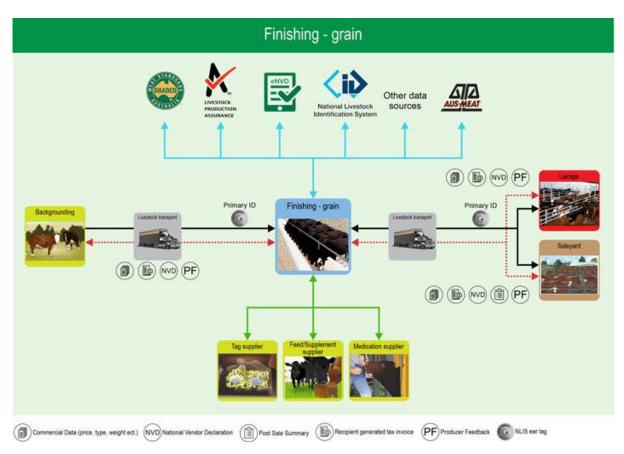


Figure 20. Inputs and outputs of the beef supply chain finishing-grain sector.

5.2.1.4.1 Physical Inputs including Critical Tracking Events (CTEs)

The physical inputs to a grain finishing system are similar as for that of a pasture finishing system. However, those inputs related to crop and pasture treatments are not required.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with inputs to the grain finishing system include the receival of:

- * Cattle
- * Experts and veterinarians
- * Veterinary drugs or other health treatments
- * Feed supplies and supplements
- * NLIS ID tags.

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Cattle	These are bovine livestock and may include any type of cattle e.g., cull cattle, calves etc.	Commercial supply contract, Feed and water record, MSA Declaration, NFAS Agents Declaration, NFAS Delivery Docket or Form B, NLIS Movement Update, NVD, Post Sale Summary, Receipt of purchase/Tax Invoice, State specific movement forms	
Experts and veterinarians	These are professionals who provide services to the breeding enterprise which ensure the safety, wellbeing, and productivity of the livestock.	Receipt of purchase/Tax Invoice, Veterinary prescription	
Veterinary drugs or other health treatments	These may be prescribed, or non- prescribed treatments or medications given to ensure the health and wellbeing of the livestock.	Receipt of purchase/Tax Invoice, Veterinary prescription	
Feed supplies and supplements	These are supplementary animal feed products such as hay or silage fodder, or mineral supplements which are provided to ensure the production efficiency and health of livestock are maintained. This may also include clean drinking water e.g., where livestock are in transit or at saleyards.	Commodity Vendor Declaration (CVD), Receipt of purchase/Tax Invoice	
NLIS ID tags	These are animal identification tags with a unique number which must be attached to animal moved off a PIC for traceability purposes.	NLIS Movement Update	

Table 16. Physical inputs and associated Critical Tracking Event related documents for a beef finishing-grain system.

5.2.1.4.2 Information Inputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). There are a range of measurements that are related to the inputs of a finishing system. These may include the source of the cattle (PIC and ownership), transport details and any vaccinations or other treatments that the cattle have undergone. The general method for identifying individual cattle is through the NLIS device attached to the cattle. There is also likely to be a movement document such as a National Vendor Declaration and/or Waybill and documentation relating to feed and supplements.

Table 17. Information inputs, Key Data Elements and Critical Tracking Event related documentation for a beef finishing-grain system.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Agreement date	This is the date on which an agreement between two parties was made.	Yes	Commercial supply contract	

APVMA approval number	This is a unique number allocated to each label by the APVMA.	Yes	Commodity Vendor Declaration, NVD	For more information visit the Australian Pesticides and Veterinary Medicine Authority.
Batch number	This is a unique number which identifies products sharing certain production characteristics and is used for traceability purposes.	Yes	Commodity Vendor Declaration, NVD	
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Feed and water record, Receipt of purchase/Tax Invoice	
Contract number	This is a unique number allocated to the contract by the seller.	Yes	Commercial supply contract, Commodity Vendor Declaration	
Date	This is the date of signing or of which a record entry or transaction was made.	Yes	Commercial supply contract, Commodity Vendor Declaration, Feed and water record, MSA Declaration, NFAS Agents Declaration, NFAS Delivery Docket or Form B, NVD, Post Sale Summary, Receipt of purchase/Tax Invoice, State specific movement forms	
From PIC	The Property Identification Code from/to where the livestock or product were consigned.	Yes	Commodity Vendor Declaration, MSA Declaration, NFAS Delivery Docket or Form B, NLIS Movement Update, NVD, Post Sale Summary, State specific movement forms	For more information visit the Integrity systems website.
Movement date	The date on which livestock or other products (e.g., feed or meat products) were transported between PICs/establishments.	Yes	Commercial supply contract, Commodity Vendor Declaration, MSA Declaration, NFAS Agents Declaration, NFAS Delivery Docket or Form B, NLIS Movement Update, NVD, State specific movement forms	
MSA Declaration Serial Number	Each MSA Declaration form has a unique serial number.	Yes	MSA Declaration	For more information on MSA visit the MLA website.
MSA Licence Number	Any establishment consigning, supplying, or identifying MSA Certified Product must be registered and have a unique MSA Licence Number.	Yes	MSA Declaration, Receipt of purchase/Tax Invoice	For more information on MSA visit the MLA website.
National Grower Registration Number	A unique number assigned to individuals registered with the National Grower Register, an online business	Yes	Commodity Vendor Declaration	

	register for Australian			
NFAS Accreditation Number	growers. This is a unique number given to accredited feedlots certified under the National Feedlot Accreditation Scheme (NFAS).	Yes	NFAS Delivery Docket or Form B	For more information visit the AUS-MEAT website.
NFAS Delivery Docket Number	Each NFAS document has a unique number or identity code.	Yes	NFAS Agents Declaration	For more information visit the AUS-MEAT website.
NLIS Tag Number/RFID	All animals transported between PICs must have a permanent National Livestock Identification System tag attached. This tag has a unique animal identification number.	Yes	NLIS Movement Update	For more information visit the Integrity systems website.
NVD Serial Number	Each NVD form has a unique serial number.	Yes	NFAS Delivery Docket or Form B, NLIS Movement Update, NVD, Post Sale Summary	For more information visit the Integrity systems website.
Prescription number	A unique certificate number issued for traceability purposes.	Yes	Veterinary prescription	
Producer/Vendor MSA Registration Number	Producers consigning cattle to MSA markets are required to be registered and have a unique MSA Registration Number.	Yes	MSA Declaration	For more information on MSA visit the MLA website.
Product code/description	This is a unique identifier or description assigned by the seller to each product type marketed or for sale.	Yes	Commodity Vendor Declaration	
Quality Assurance Officer (QAO) Certificate Number	A unique number issued to personnel issued with a Statement of Authority for demonstrating skills for compliance with meeting NFAS Rules and Standards.	Yes	NFAS Delivery Docket or Form B	
Recipient Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Feed and water record, Receipt of purchase/Tax Invoice	For more information visit the ATO website.
Seller/Supplier Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Feed and water record, Receipt of purchase/Tax Invoice	For more information visit the ATO website.
To PIC	The Property Identification Code from/to where the livestock or product were consigned.	Yes	Commodity Vendor Declaration, NLIS Movement Update, NVD, Post Sale Summary, State specific movement forms	For more information visit the Integrity systems website.

Transport registration number	The registration number of the vehicle in which the animals or product were transported. For shipments of product this will be a shipping container number.	Yes	NVD
Treatment date	The date on which a treatment or product was applied to a unit e.g., paddock, animal, fodder etc.	Yes	Commodity Vendor Declaration, Feed and water record, NVD
Veterinary Registration Number	A unique number issued to veterinarians who are registered to practice, under the state legislative requirements, within the state in which they reside.	Yes	Veterinary prescription
Movement time	This is the time at which cattle were moved from the property (PIC) of origin. Direct consignments travelling to processors by road must be slaughtered with 48 hours of dispatch.	Yes	MSA Declaration

5.2.1.4.3 Physical Outputs including Critical Tracking Events (CTEs)

The outputs from a grain finishing system or feedlot are cattle that have been prepared for transport to a saleyard for auction or directly to a processor. There is information about each animal that should be made available to these next links in the supply chain. This information is normally passed forward on movement documents such as a National Vendor Declaration. In addition, feedlots accredited under the National Feedlot Accreditation Scheme (NFAS) are required to send a NFAS Delivery Docket or Form B with the sale of cattle.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with the outputs of the grain finishing system include the movement of:

* Cattle

off the property, premises, or supply chain sector.

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Cattle	These are bovine livestock and may include any type of cattle e.g., cull cattle, calves etc.	Commercial supply contract, Feed and water record, MSA Declaration, NFAS Delivery Docket or Form B, NLIS Movement Update, NVD, Receipt of purchase/Tax Invoice, State specific movement forms	

Table 18. Physical outputs and associated Critical Tracking Event related documents for a beef finishing-grain system.

5.2.1.4.4 Information Outputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). Information outputs relating to cattle that have been finished in a feedlot system largely include those as for a pasture finishing system such as National Vendor Declaration and MSA Declaration information. However, additional information included on the NFAS Delivery Docket or Form B required under the National Feedlot Accreditation Scheme (NFAS) must be transferred along the supply chain.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Agreement date	This is the date on which an agreement between two parties was made.	Yes	Commercial supply contract	
APVMA approval number	This is a unique number allocated to each label by the APVMA.	Yes	NVD	For more information visit the Australian Pesticides and Veterinary Medicine Authority.
Batch number	This is a unique number which identifies products sharing certain production characteristics and is used for traceability purposes.	Yes	NVD	
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Feed and water record, Receipt of purchase/Tax Invoice	
Contract number	This is a unique number allocated to the contract by the seller.	Yes	Commercial supply contract	
Date	This is the date of signing or of which a record entry or transaction was made.	Yes	Commercial supply contract, Feed and water record, MSA Declaration, NFAS Delivery Docket or Form B, NVD, Receipt of purchase/Tax Invoice, State specific movement forms	
From PIC	The Property Identification Code from/to where the livestock or product were consigned.	Yes	MSA Declaration, NFAS Delivery Docket or Form B, NLIS Movement Update, NVD, State specific movement forms	For more information visit the Integrity systems website.
Movement date	The date on which livestock or other products (e.g., feed or meat products) were transported between PICs/establishments.	Yes	Commercial supply contract, MSA Declaration, NFAS Delivery Docket or Form B, NLIS Movement Update, NVD, State specific movement forms	
Movement time	This is the time at which cattle were moved from the property (PIC) of origin. Direct	Yes	MSA Declaration	

Table 19. Information outputs, Key Data Elements and Critical Tracking Event related documentation for a beef finishing-grain system.

			1	1
	consignments travelling to			
	processors by road must be			
	slaughtered with 48 hours of			
	dispatch.			
MSA Declaration	Each MSA Declaration form has	Yes	MSA Declaration	For more
Serial Number	a unique serial number.			information on MSA visit the
				MLA website.
MSA Licence	Any establishment consigning,	Yes	MSA Declaration, Receipt of	For more
Number	supplying, or identifying MSA		purchase/Tax Invoice	information on MSA visit the
	Certified Product must be			MLA website.
	registered and have a unique			
	MSA Licence Number.			
NFAS Accreditation	This is a unique number given to	Yes	NFAS Delivery Docket or	For more
Number	accredited feedlots certified		Form B	information visit
	under the National Feedlot			the AUS-MEAT website.
	Accreditation Scheme (NFAS).			wobono.
NLIS Tag	All animals transported	Yes	NLIS Movement Update	For more
Number/RFID	between PICs must have a			information visit
,	permanent National Livestock			the Integrity systems
	Identification System tag			website.
	attached. This tag has a unique			
	animal identification number.			
NVD Serial Number	Each NVD form has a unique	Yes	NFAS Delivery Docket or	For more
	serial number.		Form B, NLIS Movement	information visit
			Update, NVD	the Integrity systems
			- /	website.
Producer/Vendor	Producers consigning cattle to	Yes	MSA Declaration	For more
MSA Registration	MSA markets are required to be			information on MSA visit the
Number	registered and have a unique			MLA website.
	MSA Registration Number.			
Quality Assurance	A unique number issued to	Yes	NFAS Delivery Docket or	For more
Officer (QAO)	personnel issued with a		Form B	information visit the AUS-MEAT
Certificate Number	Statement of Authority for			website.
	demonstrating skills for			
	compliance with meeting NFAS			
	Rules and Standards.			
Recipient Australian	This is an 11-digit registration	Yes	Feed and water record,	For more
Business Number	number, issued by the		Receipt of purchase/Tax	information visit the ATO
(ABN)	Australian Tax Office, used to		Invoice	website.
	identify businesses.			
Seller/Supplier	This is an 11-digit registration	Yes	Feed and water record,	For more
Australian Business	number, issued by the		Receipt of purchase/Tax	information visit
Number (ABN)	Australian Tax Office, used to		Invoice	the ATO website.
. ,	identify businesses.			
To PIC	The Property Identification	Yes	NLIS Movement Update,	For more
	Code from/to where the		NVD, State specific	information visit
	livestock or product were		movement forms	the Integrity systems
	consigned.			website.
Transport	The registration number of the	Yes	NVD	
, registration number	vehicle in which the animals or			
-	product were transported. For			
	shipments of product this will			
			1	1

	be a shipping container number.			
Treatment date	The date on which a treatment or product was applied to a unit e.g., paddock, animal, fodder etc.	Yes	Feed and water record, NVD	

5.2.1.4.5 Regulatory and Industry Programs

Depending on the domestic or export target market, feedlots may need to meet additional requirements such as those set by the European Union Cattle Accreditation Scheme (EUCAS) for product sent to the EU. US exported meat and meat products must have records that comply with the US Quality System Assessment Program (US QAD).

- * AUS-MEAT
- * Australian Lot Feeders Association (ALFA)
- * eNVD
- * Livestock Production Assurance (LPA)
- * Meat Standards Australia (MSA)
- * National Feedlot Accreditation Scheme (NFAS)
- * National Livestock Identification System (NLIS)
- * Other data sources

5.2.1.4.6 Supply Chain Node Traceability

The National Livestock Identification System (NLIS) is the Australian livestock traceability program which is administered by Integrity Systems Company (ISC). Where stipulated by State legislation and certain export markets, the NLIS system requires all animals bought, sold, and moved along the supply chain to be tagged with an accredited NLIS ID tag. Each tag has an NLIS tag number or Radio Frequency Identifier (RFID) for the traceability of the animal throughout its lifetime. Every property which holds livestock must have a Property Identification Code (PIC) to which the livestock are assigned in the NLIS Database. Each time livestock are transferred between PICs within Australia they must be accompanied by a livestock movement declaration, such as the National Vendor Declaration (NVD) form. This document typically outlines the transporter details, consignment details, compliance with intended market specifications, withholding periods, and the details of the new property PIC. All livestock movements between PICs require an NLIS movement update to be made by either or both the consigner and receiver. Where NLIS ID tags are lost livestock must be issued with a new post-breeder tag if not on the PIC of birth and this reconciled in the NLIS Database.

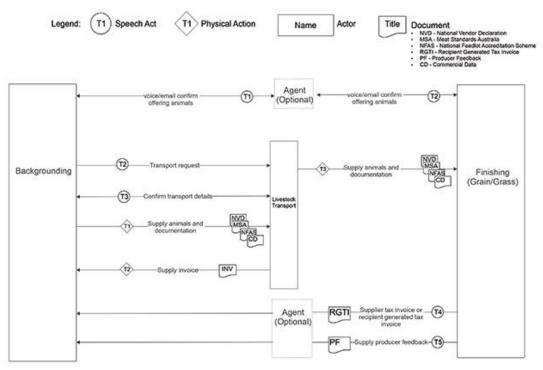
5.2.1.4.7 Data flow diagrams

Direction	Description	
Input	Backgrounding to Finishing (grain or grass)	
Input	Saleyard to Finishing (grain or grass)	
Output	Finishing - Grain to Saleyard	

Table 20. Data flow diagrams for the inputs and outputs of a beef finishing-grain system.

Output	Finishing - Grain to Lairage

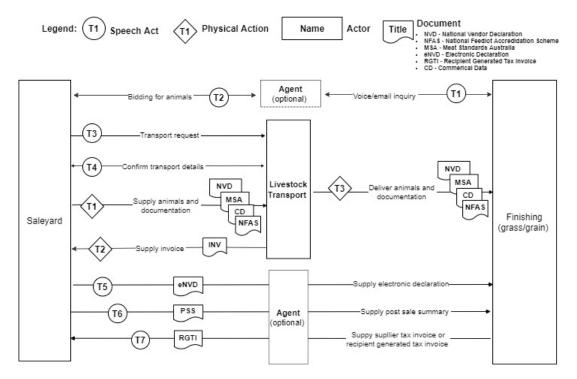
5.2.1.4.7.1 Backgrounding to Finishing (grain or grass)



Backgrounding to Finishing (Grain/Grass)

Figure 21. Data or information flows from the backgrounding to finishing (grain or grass) systems in the beef supply chain.

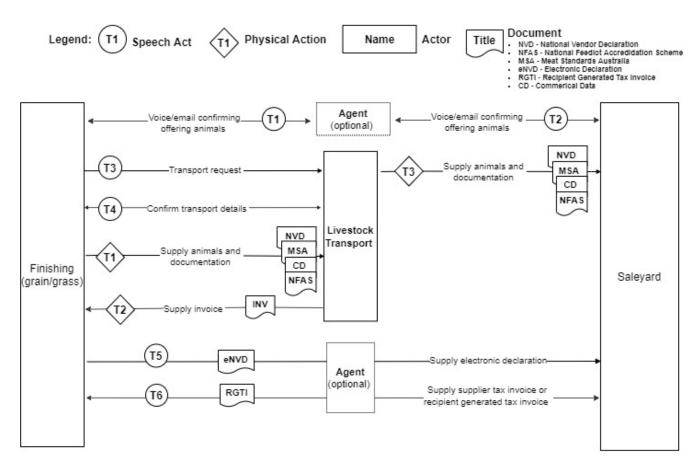
5.2.1.4.7.2 Saleyard to Finishing (grain or grass)



Saleyard to Finishing (grain/grass)

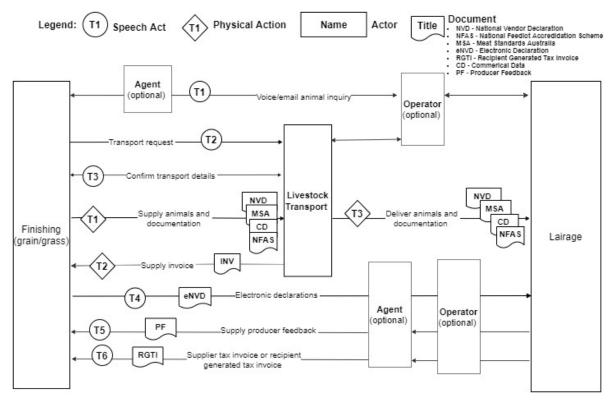
Figure 22. Data or information flows from the saleyard to finishing (grain or grass) systems in the beef supply chain.

5.2.1.4.7.3 Finishing - Grain to Saleyard



Finishing (grain/grass) to Saleyard

Figure 23. Data or information flows from the finishing-grain to saleyard systems in the beef supply chain.



5.2.1.4.7.4 Finishing - Grain to Lairage

Finishing (grain/grass) to Lairage

Figure 24. Data or information flows from the finishing-grain to lairage systems in the beef supply chain.

5.2.1.5 Saleyard

There are many types of selling options for cattle, from forward contracts to paddock sales. However, saleyard auctions are commonly used for live cattle sales. Saleyards are a physical location to which animals are transported and penned for a short period of time. Cattle are subsequently auctioned by livestock agents to the highest bidder and then transported to either a finishing or backgrounding property, to lairage (intended for slaughter) or to live export.

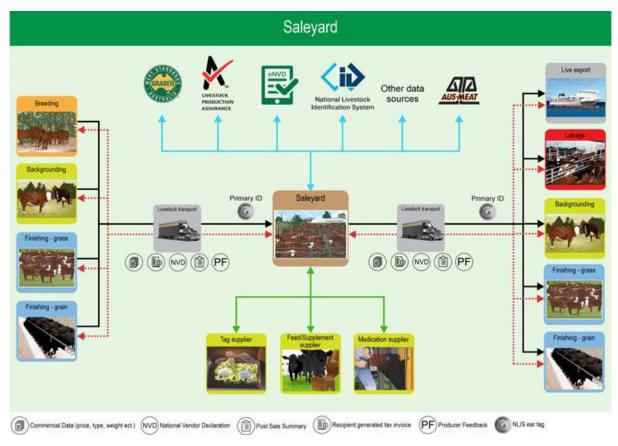


Figure 25. Inputs and outputs of the beef supply chain saleyard sector.

5.2.1.5.1 Physical Inputs including Critical Tracking Events (CTEs)

The physical inputs bought into the saleyard selling system for livestock include the livestock themselves, experts, and veterinarians for the delivery of advice and treatments relating to animal health management, health treatments, NLIS ID tags for traceability as well as feed and water.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with inputs to the saleyard system include the receival of:

- * Cattle
- * Experts and veterinarians
- * Veterinary drugs or other health treatments
- * Feed supplies and supplements
- * NLIS ID tags.

Table 21. Physical inputs and associated Critical Tracking Event related documents for a beef saleyard system.

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Cattle	These are bovine livestock and may include any type of cattle e.g., cull cattle, calves etc.	Feed and water record, MSA Declaration, NFAS Delivery Docket or Form B, NLIS Movement Update, NVD,	

Experts and veterinarians	These are professionals who provide services to the breeding enterprise which ensure the safety,	Receipt of purchase/TaxInvoice, State specificmovement formsReceipt of purchase/TaxInvoice, Veterinary
Veterinary drugs or other health treatments	wellbeing, and productivity of the livestock. These may be prescribed, or non-prescribed treatments or medications given to ensure the health and wellbeing of the livestock.	prescription Receipt of purchase/Tax Invoice, Veterinary prescription
Feed supplies and supplements	These are supplementary animal feed products such as hay or silage fodder, or mineral supplements which are provided to ensure the production efficiency and health of livestock are maintained. This may also include clean drinking water e.g., where livestock are in transit or at saleyards.	Commodity Vendor Declaration (CVD), Receipt of purchase/Tax Invoice
NLIS ID tags	These are animal identification tags with a unique number which must be attached to animal moved off a PIC for traceability purposes.	NLIS Movement Update

5.2.1.5.2 Information Inputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). Information attributes and KDEs relating to the inputs of the saleyard system are those which can be drawn from the documents associated with the Critical Tracking Events. These namely include the National Vendor Declaration, any Receipts of Purchase/Tax Invoices, animal health treatments or feeding records and any other documents required under industry certification programs such as MSA or NFSA.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
APVMA approval number	This is a unique number allocated to each label by the APVMA.	Yes	Commodity Vendor Declaration, NVD	For more information visit the Australian Pesticides and Veterinary Medicine Authority.
Batch number	This is a unique number which identifies products sharing certain production characteristics and is used for traceability purposes.	Yes	Commodity Vendor Declaration, NVD	
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Feed and water record, Receipt of purchase/Tax Invoice	
Contract number	This is a unique number allocated to the contract by the seller.	Yes	Commodity Vendor Declaration	

Table 22. Information inputs, Key Data Elements and Critical Tracking Event related documentation for a beef saleyard system.

				ر
Date	This is the date of signing or of which a record entry or transaction was made.	Yes	Commodity Vendor Declaration, Feed and water record, MSA Declaration, NFAS Delivery Docket or Form B, NVD, Receipt of purchase/Tax Invoice, State specific movement forms	For more
From PIC	The Property Identification Code from/to where the livestock or product were consigned.	Yes	Commodity Vendor Declaration, MSA Declaration, NFAS Delivery Docket or Form B, NLIS Movement Update, NVD, State specific movement forms	information visit the Integrity systems website.
Movement date	The date on which livestock or other products (e.g., feed or meat products) were transported between PICs/establishments.	Yes	Commodity Vendor Declaration, MSA Declaration, NFAS Delivery Docket or Form B, NLIS Movement Update, NVD, State specific movement forms	
Movement time	This is the time at which cattle were moved from the property (PIC) of origin. Direct consignments travelling to processors by road must be slaughtered with 48 hours of dispatch.	Yes	MSA Declaration	
MSA Declaration Serial Number	Each MSA Declaration form has a unique serial number.	Yes	MSA Declaration	For more information on MSA visit the MLA website.
MSA Licence Number	Any establishment consigning, supplying, or identifying MSA Certified Product must be registered and have a unique MSA Licence Number.	Yes	MSA Declaration, Receipt of purchase/Tax Invoice	For more information on MSA visit the MLA website.
National Grower Registration Number	A unique number assigned to individuals registered with the National Grower Register, an online business register for Australian growers.	Yes	Commodity Vendor Declaration	
NFAS Accreditation Number	This is a unique number given to accredited feedlots certified under the National Feedlot Accreditation Scheme (NFAS).	Yes	NFAS Delivery Docket or Form B	For more information visit the AUS- MEAT website.
NLIS Tag Number/RFID	All animals transported between PICs must have a permanent National Livestock Identification System tag attached. This tag has a unique animal identification number.	Yes	NLIS Movement Update	For more information visit the Integrity systems website.

NVD Serial Number	Each NVD form has a unique serial number.	Yes	NFAS Delivery Docket or Form B, NLIS Movement Update, NVD	For more information visit the Integrity systems website.
Prescription number	A unique certificate number issued for traceability purposes.	Yes	Veterinary prescription	
Producer/Vendor MSA Registration Number	Producers consigning cattle to MSA markets are required to be registered and have a unique MSA Registration Number.	Yes	MSA Declaration	For more information on MSA visit the MLA website.
Product code/description	This is a unique identifier or description assigned by the seller to each product type marketed or for sale.	Yes	Commodity Vendor Declaration	
Quality Assurance Officer (QAO) Certificate Number	A unique number issued to personnel issued with a Statement of Authority for demonstrating skills for compliance with meeting NFAS Rules and Standards.	Yes	NFAS Delivery Docket or Form B	For more information visit the AUS- MEAT website.
Recipient Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Feed and water record, Receipt of purchase/Tax Invoice	For more information visit the ATO website.
Seller/Supplier Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Feed and water record, Receipt of purchase/Tax Invoice	For more information visit the ATO website.
To PIC	The Property Identification Code from/to where the livestock or product were consigned.	Yes	Commodity Vendor Declaration, NLIS Movement Update, NVD, State specific movement forms	For more information visit the Integrity systems website.
Transport registration number	The registration number of the vehicle in which the animals or product were transported. For shipments of product this will be a shipping container number.	Yes	NVD	
Treatment date	The date on which a treatment or product was applied to a unit e.g., paddock, animal, fodder etc.	Yes	Commodity Vendor Declaration, Feed and water record, NVD	
Veterinary Registration Number	A unique number issued to veterinarians who are registered to practice, under the state legislative requirements, within the state in which they reside.	Yes	Veterinary prescription	

5.2.1.5.3 Physical Outputs including Critical Tracking Events (CTEs)

The outputs from a saleyard system are cattle that have been sold to a buyer (farm, feedlot, processor, exporter). For traceability purposes there is information that is required to be passed on to the next links in the supply chain and this information is associated with documents linked to the animals NLIS device such as the National Vendor Declaration of Post Sale Summary (PSS), NFAS Delivery Docket and MSA Declaration.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with the outputs of the saleyard system include the movement of:

* Cattle

off the property, premises, or supply chain sector.

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Cattle	These are bovine livestock and may include any type of cattle e.g., cull cattle, calves etc.	Feed and water record, MSA Declaration, NFAS Agents Declaration, NFAS Delivery Docket or Form B, NLIS Movement Update, NVD, Post Sale Summary, Receipt of purchase/Tax Invoice, State specific movement forms	

 Table 23. Physical outputs and associated Critical Tracking Event related documents for a beef saleyard system.

5.2.1.5.4 Information Outputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). Information outputs of the saleyard system are related to cattle traceability and any health, feed or water treatments received. These are detailed on regulated documents required to be passed to the next links in the supply chain including the National Vendor Declaration Form, Post Sale Summary and any documentation relating to accreditation programs such as an NFAS Delivery Docket and MSA Declaration.

Table 24. Information outputs, Key Data Elements and Critical Tracking Event related documentation for a beef saleyard system.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
APVMA approval number	This is a unique number allocated to each label by the APVMA.	Yes	NVD	For more information visit the Australian Pesticides and Veterinary Medicine Authority.
Batch number	This is a unique number which identifies products sharing certain production characteristics and is used for traceability purposes.	Yes	NVD	

Company/product code	This is an in-house code for the identification of the product in	Yes	Feed and water record, Receipt of purchase/Tax	
Date	the unit. This is the date of signing or of which a record entry or transaction was made.	Yes	Invoice Feed and water record, MSA Declaration, NFAS Agents Declaration, NFAS Delivery Docket or Form B, NVD, Post Sale Summary, Receipt of purchase/Tax Invoice, State specific movement forms	
From PIC	The Property Identification Code from/to where the livestock or product were consigned.	Yes	MSA Declaration, NFAS Delivery Docket or Form B, NLIS Movement Update, NVD, Post Sale Summary, State specific movement forms	For more information visit the Integrity systems website.
Movement date	The date on which livestock or other products (e.g., feed or meat products) were transported between PICs/establishments.	Yes	MSA Declaration, NFAS Agents Declaration, NFAS Delivery Docket or Form B, NLIS Movement Update, NVD, State specific movement forms	
Movement time	This is the time at which cattle were moved from the property (PIC) of origin. Direct consignments travelling to processors by road must be slaughtered with 48 hours of dispatch.	Yes	MSA Declaration	
MSA Declaration Serial Number	Each MSA Declaration form has a unique serial number.	Yes	MSA Declaration	For more information on MSA visit the MLA website.
MSA Licence Number	Any establishment consigning, supplying, or identifying MSA Certified Product must be registered and have a unique MSA Licence Number.	Yes	MSA Declaration, Receipt of purchase/Tax Invoice	For more information on MSA visit the MLA website.
NFAS Accreditation Number	This is a unique number given to accredited feedlots certified under the National Feedlot Accreditation Scheme (NFAS).	Yes	NFAS Delivery Docket or Form B	For more information visit the AUS- MEAT website.
NFAS Delivery Docket Number	Each NFAS document has a unique number or identity code.	Yes	NFAS Agents Declaration	For more information visit the AUS- MEAT website.
NLIS Tag Number/RFID	All animals transported between PICs must have a permanent National Livestock Identification System tag attached. This tag has a unique animal identification number.	Yes	NLIS Movement Update	For more information visit the Integrity systems website.
NVD Serial Number	Each NVD form has a unique serial number.	Yes	NFAS Delivery Docket or Form B, NLIS Movement Update, NVD, Post Sale Summary	For more information visit the Integrity systems website.

Producer/Vendor MSA Registration Number	Producers consigning cattle to MSA markets are required to be registered and have a unique MSA Registration Number.	Yes	MSA Declaration	For more information on MSA visit the MLA website.
Quality Assurance Officer (QAO) Certificate Number	A unique number issued to personnel issued with a Statement of Authority for demonstrating skills for compliance with meeting NFAS Rules and Standards.	Yes	NFAS Delivery Docket or Form B	For more information visit the AUS- MEAT website.
Recipient Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Feed and water record, Receipt of purchase/Tax Invoice	For more information visit the ATO website.
Seller/Supplier Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Feed and water record, Receipt of purchase/Tax Invoice	For more information visit the ATO website.
To PIC	The Property Identification Code from/to where the livestock or product were consigned.	Yes	NLIS Movement Update, NVD, Post Sale Summary, State specific movement forms	For more information visit the Integrity systems website.
Transport registration number	The registration number of the vehicle in which the animals or product were transported. For shipments of product this will be a shipping container number.	Yes	NVD	
Treatment date	The date on which a treatment or product was applied to a unit e.g., paddock, animal, fodder etc.	Yes	Feed and water record, NVD	

5.2.1.5.5 Regulatory and Industry Programs

- * AUS-MEAT
- * Australian Livestock Markets Association (AMLA)
- * eNVD
- * Livestock Production Assurance (LPA)
- * Meat Standards Australia (MSA)
- * National Feedlot Accreditation Scheme (NFAS)
- * National Livestock Identification System (NLIS)
- * Other data sources

5.2.1.5.6 Supply Chain Node Traceability

The National Livestock Identification System (NLIS) is the Australian livestock traceability program which is administered by Integrity Systems Company (ISC). Where stipulated by State legislation and certain export markets, the NLIS system requires all animals bought, sold, and moved along the supply chain to be tagged with an accredited NLIS ID tag. Each tag has an NLIS tag number or Radio Frequency Identifier (RFID) for the traceability of the animal throughout its lifetime. Every property which holds livestock must have a Property

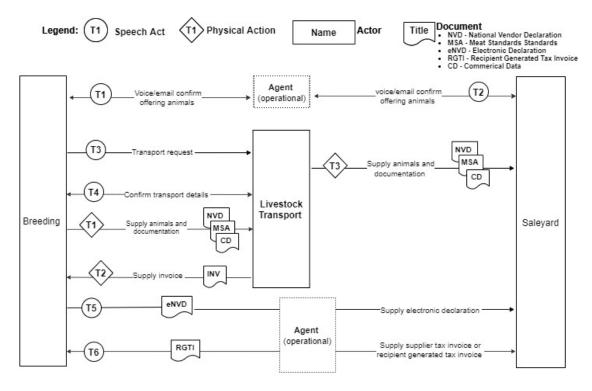
Identification Code (PIC) to which the livestock are assigned in the NLIS Database. Each time livestock are transferred between PICs within Australia they must be accompanied by a livestock movement declaration, such as the National Vendor Declaration (NVD) form. This document typically outlines the transporter details, consignment details, compliance with intended market specifications, withholding periods, and the details of the new property PIC. All livestock movements between PICs require an NLIS movement update to be made by either or both the consigner and receiver. Where NLIS ID tags are lost livestock must be issued with a new post-breeder tag if not on the PIC of birth and this reconciled in the NLIS Database.

5.2.1.5.7 Data flow diagrams

Direction	Description
Input	Breeding to Saleyard
Input	Backgrounding to Saleyard
Input	Finishing - grass to Saleyard
Input	Finishing - grain to Saleyard
Output	Saleyard to Live export
Output	Saleyard to Lairage
Output	Saleyard to Backgrounding
Output	Saleyard to Finishing - grass
Output	Saleyard to Finishing - grain

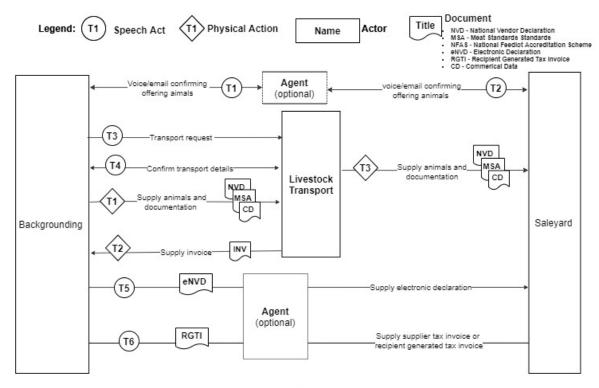
Table 25. Data flow diagrams for the inputs and outputs of a beef saleyard system.

5.2.1.5.7.1 Breeding to Saleyard



Breeding to Saleyard

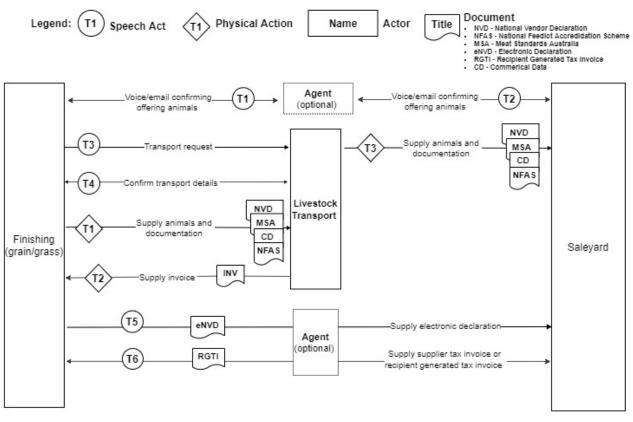
Figure 26. Data or information flows from the breeding to saleyard systems in the beef supply chain.



5.2.1.5.7.2 Backgrounding to Saleyard

Backgrounding to Saleyard

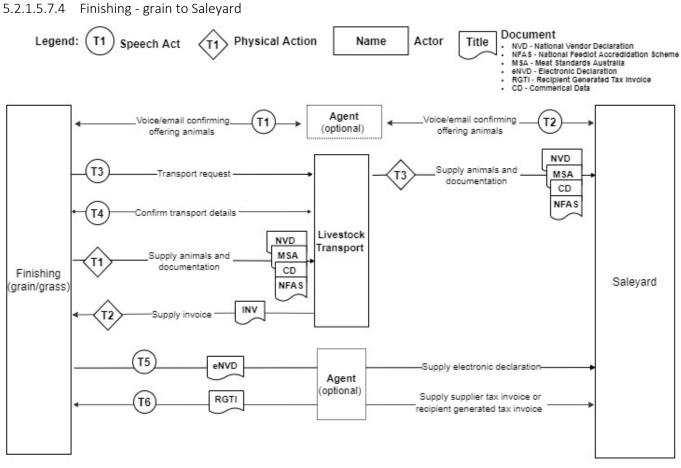
Figure 27. Data or information flows from the backgrounding to saleyard systems in the beef supply chain.



5.2.1.5.7.3 Finishing - grass to Saleyard

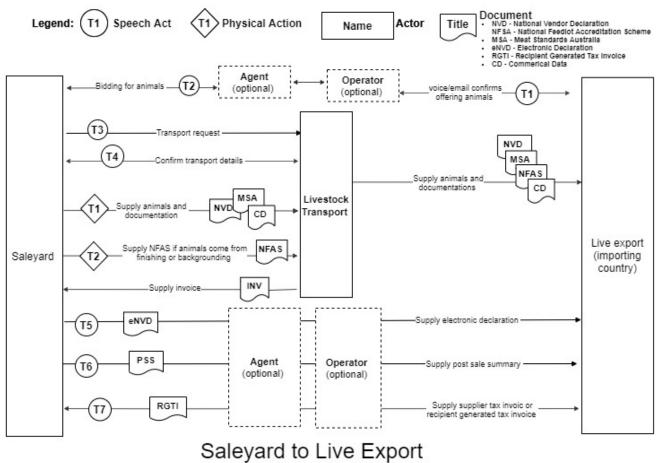
Finishing (grain/grass) to Saleyard

Figure 28. Data or information flows from the finishing-grass to saleyard systems in the beef supply chain.



Finishing (grain/grass) to Saleyard

Figure 29. Data or information flows from the finishing-grain to saleyard systems in the beef supply chain.



5.2.1.5.7.5 Saleyard to Live export

Figure 30. Data or information flows from saleyard to live export systems in the beef supply chain.

5.2.1.5.7.6 Saleyard to Lairage

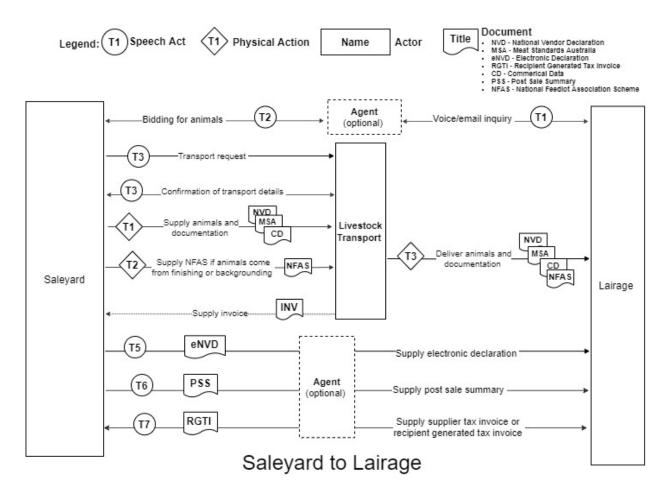
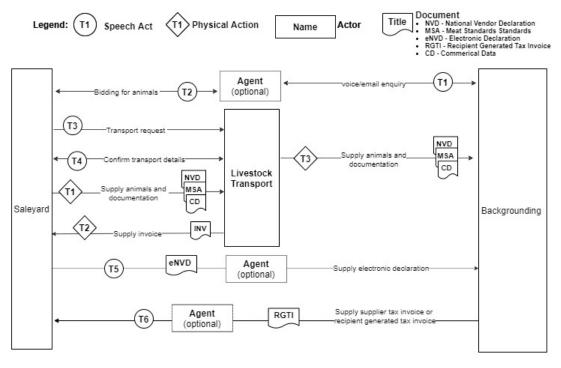


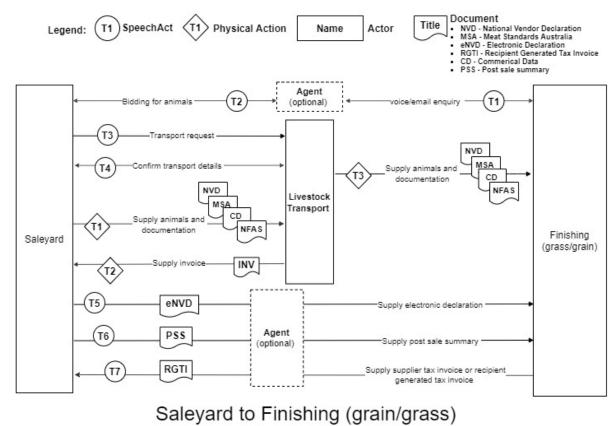
Figure 31. Data or information flows from the saleyard to lairage systems in the beef supply chain.

5.2.1.5.7.7 Saleyard to Backgrounding



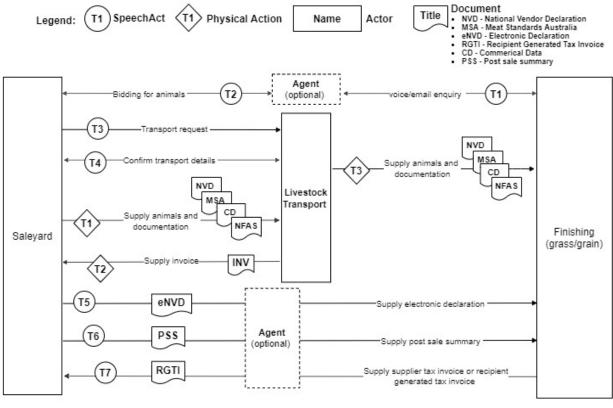
Saleyard to Backgrounding

Figure 32. Data or information flows from the saleyard to backgrounding systems in the beef supply chain.



5.2.1.5.7.8 Saleyard to Finishing – grass

Figure 33. Data or information flows from the saleyard to finishing-grass systems in the beef supply chain.



5.2.1.5.7.9 Saleyard to Finishing – grain

Saleyard to Finishing (grain/grass)

Figure 34. Data or information flows from the saleyard to finishing-grain systems in the beef supply chain.

5.2.1.6 Dairy culls - bobby calf

High quality and high-volume milk production are the primary objectives of a dairy cattle enterprise. Lactation is the process by which milk is produced and secreted from the mammary glands in a postpartum female for the purpose of feeding young. For dairy cattle to remain in lactation and continue producing milk they must undergo a yearly pregnancy and calving cycle. Bobby calves are one output of the dairy industry and are a result of surplus calf production i.e., not kept or sold as herd replacements. These calves are defined as bovine animals less than 30 days of age and weighing under 80kg liveweight that are not with their mother. Typically, bobby calves enter the red meat supply chain being sold for veal production or raised for dairy beef.

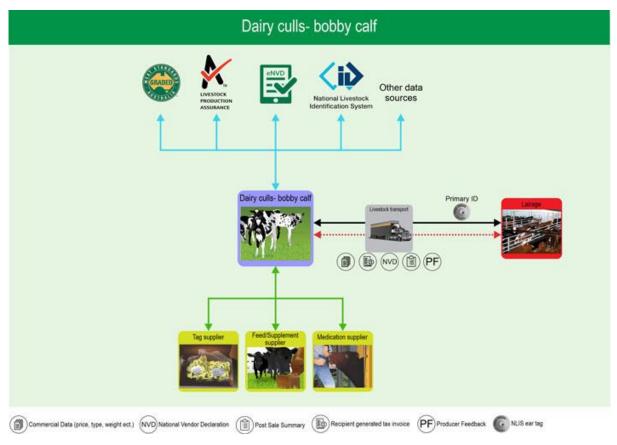


Figure 35. Inputs and outputs of the beef supply chain dairy culls-bobby calf sector.

5.2.1.6.1 Physical Inputs including Critical Tracking Events (CTEs)

The physical inputs into the bobby calf production system, which are related to the traceability of cattle exiting the system as bobby calves or dairy beef, are similar to that of a beef breeding system. These may include breeding cattle and/or technologies, veterinary input and feed supplies as well as NLIS ID tags. There are a number of documents required to track the movement of these system inputs.

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Breeding cattle	These are animals (bulls, cows/heifers) which have reached the appropriate age for breeding. Animals may be from a self-replacing herd or sourced from a seedstock breeder.	NVD, Commercial supply contract, Feed and water record, NLIS Movement Update, Receipt of purchase/Tax Invoice, State specific movement forms	
Artificial breeding technology	These are technologies such as artificial insemination or embryo transfer which are used in place of or in addition to traditional livestock breeding methods.	Commercial supply contract, Receipt of purchase/Tax Invoice	
Experts and veterinarians	These are professionals who provide services to the breeding enterprise which ensure the safety, wellbeing, and productivity of the livestock.	Receipt of purchase/Tax Invoice, Veterinary prescription	

Table 26. Physical inputs and associated Critical Tracking Event related documents for a beef dairy culls-bobby calf system.

Veterinary	These may be prescribed, or non-prescribed	Receipt of purchase/Tax
drugs or other	treatments or medications given to ensure the health	Invoice, Veterinary
health	and wellbeing of the livestock.	prescription
treatments		
Feed supplies	These are supplementary animal feed products such	Commodity Vendor
and	as hay or silage fodder, or mineral supplements	Declaration (CVD), Receipt
supplements	which are provided to ensure the production	of purchase/Tax Invoice
	efficiency and health of livestock are maintained.	
	This may also include clean drinking water e.g.,	
	where livestock are in transit or at saleyards.	
Crop and	These are agricultural chemicals applied to crops,	Product label, Receipt of
pasture	pastures and/or paddocks (inclusive of spot spraying)	purchase/Tax Invoice
treatments	which livestock may come into contact with or	
	consume.	
NLIS ID tags	These are animal identification tags with a unique	NLIS Movement Update
	number which must be attached to animal moved off	
	a PIC for traceability purposes.	

5.2.1.6.2 Information Inputs including Key Data Elements (KDEs)

There are a range of information inputs that are essential for the traceability of calf movements and treatments applied to the bobby calves in a dairy enterprise. It is essential that all of these Key Data Elements are recorded by the producer for auditing purposes. These may include the NVD Serial Number, NLIS Tag Number, To and From PIC, Movement date and Veterinary Registration Number.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Agreement date	This is the date on which an agreement between two parties was made.	Yes	Commercial supply contract	
APVMA approval number	This is a unique number allocated to each label by the APVMA.	Yes	Commodity Vendor Declaration, NVD, Product label	For more information visit the Australian Pesticides and Veterinary Medicine Authority.
Batch number	This is a unique number which identifies products sharing certain production characteristics and is used for traceability purposes.	Yes	Commodity Vendor Declaration, NVD, Product label	
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Feed and water record, Receipt of purchase/Tax Invoice	
Contract number	This is a unique number allocated to the contract by the seller.	Yes	Commercial supply contract, Commodity Vendor Declaration	
Date	This is the date of signing or of which a record entry or transaction was made.	Yes	Commercial supply contract, Commodity Vendor Declaration, Feed	

Table 27. Information inputs, Key Data Elements and Critical Tracking Event related documentation for a beef dairy culls-bobby calf system.

			and water record, NVD, Receipt of purchase/Tax Invoice, State specific movement forms	
From PIC	The Property Identification Code from/to where the livestock or product were consigned.	Yes	Commodity Vendor Declaration, NLIS Movement Update, NVD, State specific movement forms	For more information visit the Integrity systems website.
Movement date	The date on which livestock or other products (e.g., feed or meat products) were transported between PICs/establishments.	Yes	Commercial supply contract, Commodity Vendor Declaration, NLIS Movement Update, NVD, State specific movement forms	
MSA Licence Number	Any establishment consigning, supplying, or identifying MSA Certified Product must be registered and have a unique MSA Licence Number.	Yes	Receipt of purchase/Tax Invoice	For more information on MSA visit the MLA website.
National Grower Registration Number	A unique number assigned to individuals registered with the National Grower Register, an online business register for Australian growers.	Yes	Commodity Vendor Declaration	
NLIS Tag Number/RFID	All animals transported between PICs must have a permanent National Livestock Identification System tag attached. This tag has a unique animal identification number.	Yes	NLIS Movement Update	For more information visit the Integrity systems website.
NVD Serial Number	Each NVD form has a unique serial number.	Yes	NLIS Movement Update, NVD	For more information visit the Integrity systems website.
Prescription number	A unique certificate number issued for traceability purposes.	Yes	Veterinary prescription	
Product code/description	This is a unique identifier or description assigned by the seller to each product type marketed or for sale.	Yes	Commodity Vendor Declaration	
Recipient Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Feed and water record, Receipt of purchase/Tax Invoice	For more information visit the ATO website.
Seller/Supplier Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Feed and water record, Receipt of purchase/Tax Invoice	For more information visit the ATO website.
To PIC	The Property Identification Code from/to where the livestock or product were consigned.	Yes	Commodity Vendor Declaration, NLIS Movement Update, NVD,	For more information visit the Integrity systems website.

			State specific movement forms	
Transport registration number	The registration number of the vehicle in which the animals or product were transported. For shipments of product this will be a shipping container number.	Yes	NVD	
Treatment date	The date on which a treatment or product was applied to a unit e.g., paddock, animal, fodder etc.	Yes	Commodity Vendor Declaration, Feed and water record, NVD	
Veterinary Registration Number	A unique number issued to veterinarians who are registered to practice, under the state legislative requirements, within the state in which they reside.	Yes	Veterinary prescription	

5.2.1.6.3 Physical Outputs including Critical Tracking Events (CTEs)

The physical outputs of a bobby calf production system which are associated with the red meat supply chain include the bobby calves themselves. Critical Tracking Event related documentation is very similar to that of a beef production system with documents such as the NVD, State specific movement forms and NLIS Movement Updates being required.

Table 28. Physical outputs and associated Critical Tracking Event related documents for a beef dairy culls-bobby calf system.

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Bobby calves	These are young cattle of less thirty days of age and weighing less than 80kg that are typically sold for meat or raised for dairy beef.	NVD, Commercial supply contract, Feed and water record, MSA Declaration, NLIS Movement Update, Receipt of purchase/Tax Invoice, State specific movement forms	

5.2.1.6.4 Information Outputs including Key Data Elements (KDEs)

There are a range of information outputs that are essential for the traceability of calf movements and treatments applied to the bobby calves in a dairy enterprise. It is essential that all of these Key Data Elements are recorded by the producer for auditing purposes. These may include the NVD Serial Number, NLIS Tag Number, To and From PIC, Movement date and Veterinary Registration Number.

Table 29. Information outputs, Key Data Elements and Critical Tracking Event related documentation for a beef dairy culls-bobby calf system.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Agreement date	This is the date on which an agreement between two parties was made.	Yes	Commercial supply contract	

APVMA approval number	This is a unique number allocated to each label by the APVMA.	Yes	NVD	For more information visit the Australian Pesticides and Veterinary Medicine Authority.
Batch number	This is a unique number which identifies products sharing certain production characteristics and is used for traceability purposes.	Yes	NVD	
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Feed and water record, Receipt of purchase/Tax Invoice	
Contract number	This is a unique number allocated to the contract by the seller.	Yes	Commercial supply contract	
Date	This is the date of signing or of which a record entry or transaction was made.	Yes	Commercial supply contract, Feed and water record, MSA Declaration, NVD, Receipt of purchase/Tax Invoice, State specific movement forms	
From PIC	The Property Identification Code from/to where the livestock or product were consigned.	Yes	MSA Declaration, NLIS Movement Update, NVD, State specific movement forms	For more information visit the Integrity systems website.
Movement date	The date on which livestock or other products (e.g., feed or meat products) were transported between PICs/establishments.	Yes	Commercial supply contract, MSA Declaration, NLIS Movement Update, NVD, State specific movement forms	
Movement time	This is the time at which cattle were moved from the property (PIC) of origin. Direct consignments travelling to processors by road must be slaughtered with 48 hours of dispatch.	Yes	MSA Declaration	
MSA Declaration Serial Number	Each MSA Declaration form has a unique serial number.	Yes	MSA Declaration	For more information on MSA visit the MLA website.
MSA Licence Number	Any establishment consigning, supplying, or identifying MSA Certified Product must be registered and have a unique MSA Licence Number.	Yes	MSA Declaration, Receipt of purchase/Tax Invoice	For more information on MSA visit the MLA website.
NLIS Tag Number/RFID	All animals transported between PICs must have a permanent National Livestock Identification System tag attached. This tag has a unique animal identification number.	Yes	NLIS Movement Update	For more information visit the Integrity systems website.

NVD Serial Number	Each NVD form has a unique serial number.	Yes	NLIS Movement Update, NVD	For more information visit the Integrity systems website.
Producer/Vendor MSA Registration Number	Producers consigning cattle to MSA markets are required to be registered and have a unique MSA Registration Number.	Yes	MSA Declaration	For more information on MSA visit the MLA website.
Recipient Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Feed and water record, Receipt of purchase/Tax Invoice	For more information visit the ATO website.
Seller/Supplier Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Feed and water record, Receipt of purchase/Tax Invoice	For more information visit the ATO website.
To PIC	The Property Identification Code from/to where the livestock or product were consigned.	Yes	NLIS Movement Update, NVD, State specific movement forms	For more information visit the Integrity systems website.
Transport registration number	The registration number of the vehicle in which the animals or product were transported. For shipments of product this will be a shipping container number.	Yes	NVD	
Treatment date	The date on which a treatment or product was applied to a unit e.g., paddock, animal, fodder etc.	Yes	Feed and water record, NVD	

- 5.2.1.6.5 Regulatory and Industry Programs
- * Dairy Australia
- * eNVD
- * Livestock Production Assurance (LPA)
- * Meat Standards Australia (MSA)
- * National Livestock Identification System (NLIS)
- * Other data sources

5.2.1.6.6 Supply Chain Node Traceability

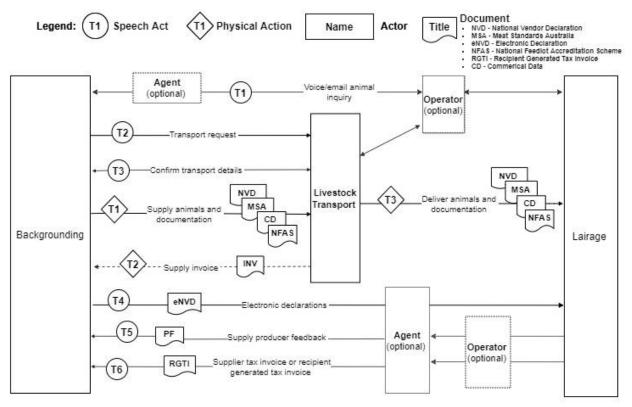
The National Livestock Identification System (NLIS) is the Australian livestock traceability program which is administered by Integrity Systems Company (ISC). Where stipulated by State legislation and certain export markets, the NLIS system requires all animals bought, sold, and moved along the supply chain to be tagged with an accredited NLIS ID tag. Each tag has an NLIS tag number or Radio Frequency Identifier (RFID) for the traceability of the animal throughout its lifetime. Every property which holds livestock must have a Property Identification Code (PIC) to which the livestock are assigned in the NLIS Database. Each time livestock are transferred between PICs within Australia they must be accompanied by a livestock movement declaration, such as the National Vendor Declaration (NVD) form. This document typically outlines the transporter details, consignment details, compliance with intended market specifications, withholding periods, and the details of the new property PIC. All livestock movements between PICs require an NLIS movement update to be made by either or both the consigner and receiver. Where NLIS ID tags are lost livestock must be issued with a new post-breeder tag if not on the PIC of birth and this reconciled in the NLIS Database.

5.2.1.6.7 Data flow diagrams

Table 30. Data flow diagrams for the inputs and outputs of a beef dairy culls-bo	hhv calf system
Tuble 50. Data flow diagrams for the inputs and outputs of a beef daily cans-be	bby culj system.

Direction	Description
Output	Dairy culls - bobby calf to Lairage

5.2.1.6.7.1 Dairy culls - bobby calf to Lairage



Backgrounding to Lairage (Dairy culls - bobby calf)

Figure 36. Data or information flows from the backgrounding to lairage (dairy culls-bobby calf) systems in the beef supply chain.

5.2.1.7 Dairy culls – cows

High quality and high-volume milk production are the primary objectives of a dairy cattle enterprise. Therefore, animals must be efficient and productive milk producers, in good health and at an appropriate age. Dairy culls are any unwanted livestock that do not meet the production requirements of the system, and this may be due to factors such as genetics, poor breeding performance, poor health, or age. These animals are removed from the herd and most typically enter the red meat supply chain after being sent for processing.

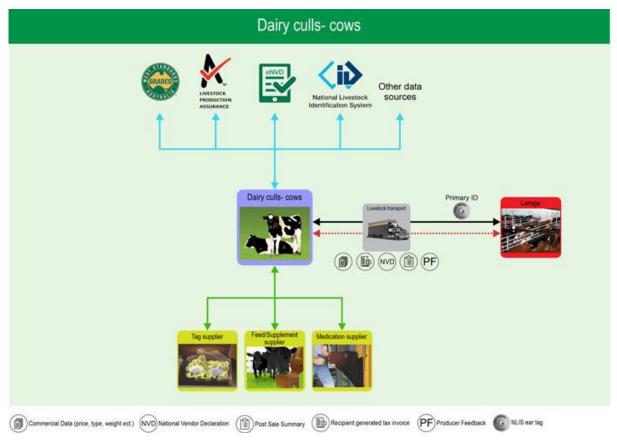


Figure 37. Inputs and outputs of the beef supply chain dairy culls-cows sector.

5.2.1.7.1 Physical Inputs including Critical Tracking Events (CTEs)

The physical inputs into the dairy production system, which are related to the traceability of cattle exiting the system as cull cattle, are similar to that of a beef breeding system. These may include breeding cattle and/or technologies, veterinary input and feed supplies as well as NLIS ID tags. There are a number of documents required to track the movement of these system inputs.

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Breeding cattle	These are animals (bulls, cows/heifers) which have reached the appropriate age for breeding. Animals may be from a self-replacing herd or sourced from a seedstock breeder.	NVD, Commercial supply contract, Feed and water record, NLIS, Movement Update, Receipt of purchase/Tax Invoice, State specific movement forms	
Artificial breeding technology	These are technologies such as artificial insemination or embryo transfer which are used in place of or in addition to traditional livestock breeding methods.	Commercial supply contract, Receipt of purchase/Tax Invoice	
Experts and veterinarians	These are professionals who provide services to the breeding enterprise which ensure the safety, wellbeing, and productivity of the livestock.	Receipt of purchase/Tax Invoice, Veterinary prescription	

Table 31. Physical inputs and associated Critical Tracking Event related documents for a beef dairy culls-cows system.

Veterinary	These may be prescribed, or non-prescribed	Receipt of purchase/Tax
drugs or other	treatments or medications given to ensure the	Invoice, Veterinary
health	health and wellbeing of the livestock.	prescription
treatments		
Feed supplies	These are supplementary animal feed products such	Commodity Vendor
and	as hay or silage fodder, or mineral supplements	Declaration (CVD), Receipt
supplements	which are provided to ensure the production	of purchase/Tax Invoice
	efficiency and health of livestock are maintained.	
	This may also include clean drinking water e.g.,	
	where livestock are in transit or at saleyards.	
Crop and	These are agricultural chemicals applied to crops,	Product label, Receipt of
pasture	pastures and/or paddocks (inclusive of spot spraying)	purchase/Tax Invoice
treatments	which livestock may come into contact with or	
	consume.	
NLIS ID tags	These are animal identification tags with a unique	NLIS Movement Update
	number which must be attached to animal moved off	
	a PIC for traceability purposes.	

5.2.1.7.2 Information Inputs including Key Data Elements (KDEs)

There are a range of information inputs that are essential for the traceability of movements and treatments applied to the cull cattle in a dairy enterprise. It is essential that all of these Key Data Elements are recorded by the producer for auditing purposes. These may include the NVD Serial Number, NLIS Tag Number, To and From PIC, Movement date and Veterinary Registration Number.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Agreement date	This is the date on which an agreement between two parties was made.	Yes	Commercial supply contract	
APVMA approval number	This is a unique number allocated to each label by the APVMA.	Yes	Commodity Vendor Declaration, NVD, Product label	For more information visit the Australian Pesticides and Veterinary Medicine Authority.
Batch number	This is a unique number which identifies products sharing certain production characteristics and is used for traceability purposes.	Yes	Commodity Vendor Declaration, NVD, Product label	
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Receipt of purchase/Tax Invoice	
Contract number	This is a unique number allocated to the contract by the seller.	Yes	Commercial supply contract, Commodity Vendor Declaration	
Date	This is the date of signing or of which a record entry or transaction was made.	Yes	Commercial supply contract, Commodity Vendor Declaration, Feed	

Table 32. Information inputs, Key Data Elements and Critical Tracking Event related documentation for a beef dairy culls-cows system.

			and water record, NVD, Receipt of purchase/Tax Invoice, State specific movement forms	
From PIC	The Property Identification Code from/to where the livestock or product were consigned.	Yes	Commodity Vendor Declaration, NLIS Movement Update, NVD, State specific movement forms	For more information visit the Integrity systems website.
Movement date	The date on which livestock or other products (e.g., feed or meat products) were transported between PICs/establishments.	Yes	Commercial supply contract, Commodity Vendor Declaration, NLIS Movement Update, NVD, State specific movement forms	
MSA Licence Number	Any establishment consigning, supplying, or identifying MSA Certified Product must be registered and have a unique MSA Licence Number.	Yes	Receipt of purchase/Tax Invoice	For more information on MSA visit the MLA website.
National Grower Registration Number	A unique number assigned to individuals registered with the National Grower Register, an online business register for Australian growers.	Yes	Commodity Vendor Declaration	
NLIS Tag Number/RFID	All animals transported between PICs must have a permanent National Livestock Identification System tag attached. This tag has a unique animal identification number.	Yes	NLIS Movement Update	For more information visit the Integrity systems website.
NVD Serial Number	Each NVD form has a unique serial number.	Yes	NLIS Movement Update, NVD	For more information visit the Integrity systems website.
Prescription number	A unique certificate number issued for traceability purposes.	Yes	Veterinary prescription	
Product code/description	This is a unique identifier or description assigned by the seller to each product type marketed or for sale.	Yes	Commodity Vendor Declaration	
Recipient Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Feed and water record, Receipt of purchase/Tax Invoice	For more information visit the ATO website.
Seller/Supplier Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Feed and water record, Receipt of purchase/Tax Invoice	For more information visit the ATO website.
To PIC	The Property Identification Code from/to where the livestock or product were consigned.	Yes	Commodity Vendor Declaration, NLIS Movement Update, NVD,	For more information visit the Integrity systems website.

			State specific movement forms	
Transport registration number	The registration number of the vehicle in which the animals or product were transported. For shipments of product this will be a shipping container number.	Yes	NVD	
Treatment date	The date on which a treatment or product was applied to a unit e.g., paddock, animal, fodder etc.	Yes	Commodity Vendor Declaration, Feed and water record, NVD	
Veterinary Registration Number	A unique number issued to veterinarians who are registered to practice, under the state legislative requirements, within the state in which they reside.	Yes	Veterinary prescription	

5.2.1.7.3 Physical Outputs including Critical Tracking Events (CTEs)

The physical outputs of a dairy production system which are associated with the red meat supply chain include the cull cattle themselves. Critical Tracking Event related documentation is very similar to that of a beef production system with documents such as the NVD, State specific movement forms and NLIS Movement Updates being required.

Table 33. Physical outputs and associated Critical Tracking Event related documents for a beef dairy culls-con	vs system.
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Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Cull cattle	These are any unwanted livestock to be removed from the herd due to factors such as poor performance or age.	NVD, Commercial supply contract, Feed and water record, MSA Declaration, NLIS Movement Update, Receipt of purchase/Tax Invoice, State specific movement forms	

5.2.1.7.4 Information Outputs including Key Data Elements (KDEs)

There are a range of information outputs that are essential for the traceability of movements and treatments applied to cull cattle in a dairy enterprise. It is essential that all of these Key Data Elements are recorded by the producer for auditing purposes. These may include the NVD Serial Number, NLIS Tag Number, To and From PIC, Movement date and Veterinary Registration Number.

Table 34. Information outputs, Key Data Elements and Critical Tracking Event related documentation for a beef dairy culls-cows system.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Agreement date	This is the date on which an agreement between two parties was made.	Yes	Commercial supply contract	

APVMA approval number	This is a unique number allocated to each label by the APVMA.	Yes	NVD	For more information visit the Australian Pesticides and
				Veterinary Medicine Authority.
Batch number	This is a unique number which identifies products sharing certain production characteristics and is used for traceability purposes.	Yes	NVD	
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Receipt of purchase/Tax Invoice	
Contract number	This is a unique number allocated to the contract by the seller.	Yes	Commercial supply contract	
Date	This is the date of signing or of which a record entry or transaction was made.	Yes	Commercial supply contract, Feed and water record, MSA Declaration, NVD, Receipt of purchase/Tax Invoice, State specific movement forms	
From PIC	The Property Identification Code from/to where the livestock or product were consigned.	Yes	MSA Declaration, NLIS Movement Update, NVD, State specific movement forms	For more information visit the Integrity systems website.
Movement date	The date on which livestock or other products (e.g., feed or meat products) were transported between PICs/establishments.	Yes	Commercial supply contract, MSA Declaration, NLIS Movement Update, NVD, State specific movement forms	
Movement time	This is the time at which cattle were moved from the property (PIC) of origin. Direct consignments travelling to processors by road must be slaughtered with 48 hours of dispatch.	Yes	MSA Declaration	
MSA Declaration Serial Number	Each MSA Declaration form has a unique serial number.	Yes	MSA Declaration	For more information on MSA visit the MLA website.
MSA Licence Number	Any establishment consigning, supplying, or identifying MSA Certified Product must be registered and have a unique MSA Licence Number.	Yes	MSA Declaration, Receipt of purchase/Tax Invoice	For more information on MSA visit the MLA website.
NLIS Tag Number/RFID	All animals transported between PICs must have a permanent National Livestock Identification System tag attached. This tag has a unique animal identification number.	Yes	NLIS Movement Update	For more information on MSA visit the MLA website.

NVD Serial Number	Each NVD form has a unique serial number.	Yes	NLIS Movement Update, NVD	For more information visit the Integrity systems website.
Producer/Vendor MSA Registration Number	Producers consigning cattle to MSA markets are required to be registered and have a unique MSA Registration Number.	Yes	MSA Declaration	For more information on MSA visit the MLA website.
Recipient Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Feed and water record, Receipt of purchase/Tax Invoice	For more information visit the ATO website.
Seller/Supplier Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Feed and water record, Receipt of purchase/Tax Invoice	For more information visit the ATO website.
Το ΡΙϹ	The Property Identification Code from/to where the livestock or product were consigned.	Yes	NLIS Movement Update, NVD, State specific movement forms	For more information visit the Integrity systems website.
Transport registration number	The registration number of the vehicle in which the animals or product were transported. For shipments of product this will be a shipping container number.	Yes	NVD	
Treatment date	The date on which a treatment or product was applied to a unit e.g., paddock, animal, fodder etc.	Yes	Feed and water record, NVD	

5.2.1.7.5 Regulatory and Industry Programs

- * Dairy Australia
- * eNVD
- * Livestock Production Assurance (LPA)
- * Meat Standards Australia (MSA)
- * National Livestock Identification System (NLIS)
- * Other data sources

5.2.1.7.6 Supply Chain Node Traceability

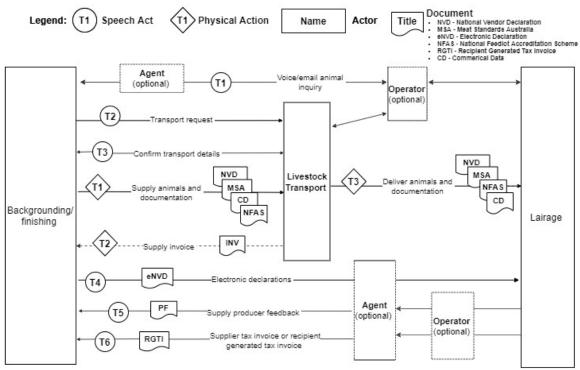
The National Livestock Identification System (NLIS) is the Australian livestock traceability program which is administered by Integrity Systems Company (ISC). Where stipulated by State legislation and certain export markets, the NLIS system requires all animals bought, sold, and moved along the supply chain to be tagged with an accredited NLIS ID tag. Each tag has an NLIS tag number or Radio Frequency Identifier (RFID) for the traceability of the animal throughout its lifetime. Every property which holds livestock must have a Property Identification Code (PIC) to which the livestock are assigned in the NLIS Database. Each time livestock are transferred between PICs within Australia they must be accompanied by a livestock movement declaration, such as the National Vendor Declaration (NVD) form. This document typically outlines the transporter details, consignment details, compliance with intended market specifications, withholding periods, and the details of the new property PIC. All livestock movements between PICs require an NLIS movement update to be made by either or both the consigner and receiver. Where NLIS ID tags are lost livestock must be issued with a new post-breeder tag if not on the PIC of birth and this reconciled in the NLIS Database.

5.2.1.7.7 Data flow diagrams

Direction	Description
Output	Dairy culls - cows to Lairage

Table 35. Data flow diagrams for the inputs and outputs of a beef dairy culls-cows system.

5.2.1.7.7.1 Dairy culls - cows to Lairage



Backgrounding to Lairage (Dairy culls - Cows)

Figure 38. Data or information flows from the backgrounding to lairage (dairy culls-cows) systems in the beef supply chain.

5.2.2 Exporting Country - Processing

5.2.2.1 Lairage

Lairage is the location whereby animals are rested immediately prior to slaughter. These locations are usually holding pens where animals must spend a minimum of 2 hrs before being slaughtered. Typically, animals spend between 12-24 hrs in lairage in which time they have free access to potable water.

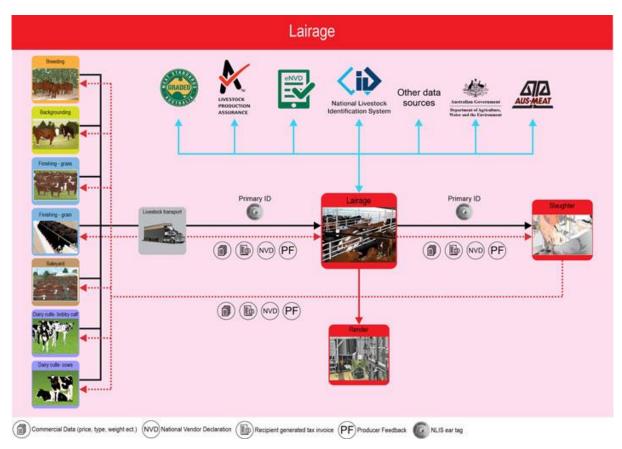


Figure 39. Inputs and outputs of the beef supply chain lairage sector.

5.2.2.1.1 Physical Inputs including Critical Tracking Events (CTEs)

Lairage is simply the area for holding the cattle before slaughter and doesn't include any complex processes. Therefore, the inputs are minimal.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with inputs to the lairage system include the receival of:

* Cattle.

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Cattle	These are bovine livestock and may include any type of cattle e.g., cull cattle, calves etc.	Commercial supply contract, Feed and water record, MSA Declaration, NFAS Agents Declaration, NFAS Delivery Docket or Form B, NLIS Movement Update, NVD, Post Sale Summary, Receipt of purchase/Tax Invoice, State specific movement forms	

Table 36. Physical inputs and associated Critical Tracking Event related documents for a beef lairage system.

5.2.2.1.2 Information Inputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). Critical information associated with the transfer of cattle into lairage is drawn from key movement documentation such as the National Vendor Declaration form. Other information required by industry programs such as MSA and NFSA is also transferred into lairage.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Agreement date	This is the date on which an agreement between two parties was made.	Yes	Commercial supply contract	
APVMA approval number	This is a unique number allocated to each label by the APVMA.	Yes	NVD	For information on veterinary drugs and chemicals look at the AVPMA website.
Batch number	This is a unique number which identifies products sharing certain production characteristics and is used for traceability purposes.	Yes	NVD	For information on veterinary drugs and chemicals look at the AVPMA website.
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Receipt of purchase/Tax Invoice	
Contract number	This is a unique number allocated to the contract by the seller.	Yes	Commercial supply contract	
Date	This is the date of signing or of which a record entry or transaction was made.	Yes	Commercial supply contract, Feed and water record, MSA Declaration, NFAS Agents Declaration, NFAS Delivery Docket or Form B, NVD, Post Sale Summary, Receipt of purchase/Tax Invoice, State specific movement forms	
From PIC	The Property Identification Code from/to where the livestock or product were consigned.	Yes	MSA Declaration, NFAS Delivery Docket or Form B, NLIS Movement Update, NVD, Post Sale Summary, State specific movement forms	For more information visit the Integrity systems website.
Movement date	The date on which livestock or other products (e.g., feed or meat products) were transported between PICs/establishments.	Yes	Commercial supply contract, MSA Declaration, NFAS Agents Declaration, NFAS Delivery Docket or Form B, NLIS Movement Update, NVD, State specific movement forms	

Table 37. Information inputs, Key Data Elements and Critical Tracking Event related documentation for a beef lairage system.

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Movement time	This is the time at which cattle were moved from the property (PIC) of origin. Direct consignments travelling to processors by road must be slaughtered with 48 hours of dispatch.	Yes	MSA Declaration	
MSA Declaration	Each MSA Declaration form	Yes	MSA Declaration	For more
Serial Number	has a unique serial number.			information on MSA visit the MLA website.
MSA Licence Number	Any establishment consigning, supplying, or identifying MSA Certified Product must be registered and have a unique MSA Licence Number.	Yes	MSA Declaration, Receipt of purchase/Tax Invoice	For more information on MSA visit the MLA website.
NFAS Accreditation Number	This is a unique number given to accredited feedlots certified under the National Feedlot Accreditation Scheme (NFAS).	Yes	NFAS Delivery Docket or Form B	For more information visit the AUS-MEAT website.
NFAS Delivery Docket Number	Each NFAS document has a unique number or identity code.	Yes	NFAS Agents Declaration	For more information visit the AUS-MEAT website.
NLIS Tag Number/RFID	All animals transported between PICs must have a permanent National Livestock Identification System tag attached. This tag has a unique animal identification number.	Yes	NLIS Movement Update	For more information visit the Integrity systems website.
NVD Serial Number	Each NVD form has a unique serial number.	Yes	NFAS Delivery Docket or Form B, NLIS Movement Update, NVD, Post Sale Summary	For more information visit the Integrity systems website.
Producer/Vendor MSA Registration Number	Producers consigning cattle to MSA markets are required to be registered and have a unique MSA Registration Number.	Yes	MSA Declaration	For more information on MSA visit the MLA website.
Quality Assurance Officer (QAO) Certificate Number	A unique number issued to personnel issued with a Statement of Authority for demonstrating skills for compliance with meeting NFAS Rules and Standards.	Yes	NFAS Delivery Docket or Form B	For more information visit the AUS-MEAT website.
Recipient Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Receipt of purchase/Tax Invoice	For more information visit the ATO website.

Seller/Supplier Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Feed and water record, Receipt of purchase/Tax Invoice	For more information visit the ATO website.
To PIC	The Property Identification Code from/to where the livestock or product were consigned.	Yes	NLIS Movement Update, NVD, Post Sale Summary, State specific movement forms	For more information visit the Integrity systems website.
Transport registration number	The registration number of the vehicle in which the animals or product were transported. For shipments of product this will be a shipping container number.	Yes	NVD	
Treatment date	The date on which a treatment or product was applied to a unit e.g., paddock, animal, fodder etc.	Yes	Feed and water record, NVD	

5.2.2.1.3 Physical Outputs including Critical Tracking Events (CTEs)

The physical outputs from lairage include cattle suitable for processing, or in situations where animals are unfit for movement, they may be humanely slaughtered in lairage. In such instances, condemned carcases may also be outputs.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with the outputs of the lairage system include the movement of:

* Cattle

* Condemned carcase

off the property, premises, or supply chain sector.

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Cattle	These are bovine livestock and may include any type of cattle e.g., cull cattle, calves etc.	Commercial supply contract, Feed and water record, MSA Declaration, NFAS Agents Declaration, NFAS Delivery Docket or Form B, NLIS Movement Update, NVD, Post Sale Summary, Processing plant production management system, Receipt of purchase/Tax Invoice, State specific movement forms	
Condemned carcase	The body of a slaughtered animal deemed unfit for human consumption. This may be a condemned dressed carcase when hide,	Commercial supply contract, Feed and water record, MSA Declaration, NFAS Agents Declaration, NFAS Delivery Docket or Form B, NLIS Movement Update, NVD, Post Sale Summary, Processing plant production management system, Receipt of purchase/Tax Invoice, State specific movement forms	

 Table 38. Physical outputs and associated Critical Tracking Event related documents for a beef lairage system.

head, feet and offal are	
removed.	

5.2.2.1.4 Information Outputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). Information outputs for lairage are those which are found on critical transfer documentation and the required documents for regulatory programs. This includes documents such as the NVD, NFAS Delivery Docket or Form B and MSA Declaration.

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Table 39. Information outputs	, Key Data Elements and Critica	і Tracking Event relatea	documentation for a beef lairage system.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Agreement date	This is the date on which an agreement between two parties was made.	Yes	Commercial supply contract, Processing plant production management system	
APVMA approval number	This is a unique number allocated to each label by the APVMA.	Yes	NVD, Processing plant production management system	For information On veterinary drugs and chemicals look at the AVPMA website.
Batch number	This is a unique number which identifies products sharing certain production characteristics and is used for traceability purposes.	Yes	NVD, Processing plant production management system	
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Processing plant production management system, Receipt of purchase/Tax Invoice	
Contract number	This is a unique number allocated to the contract by the seller.	Yes	Commercial supply contract, Processing plant production management system	
Date	This is the date of signing or of which a record entry or transaction was made.	Yes	Commercial supply contract, Feed and water record, MSA Declaration, NFAS Agents Declaration, NFAS Delivery Docket or Form B, NVD, Post Sale Summary, Processing plant production management system, Receipt of purchase/Tax Invoice, State specific movement forms	
From PIC	The Property Identification Code from/to where the livestock or product were consigned.	Yes	MSA Declaration, NFAS Delivery Docket or Form B, NLIS Movement Update, NVD, Post Sale Summary, Processing plant production management system, State specific movement forms	For more information visit the Integrity systems website.
Lot number	A lot is a number assigned by the processor to each group of cattle consigned	Yes	Processing plant production management system	

	to slaughter and is usually vendor specific.			
Movement date	The date on which livestock or other products (e.g., feed or meat products) were transported between PICs/establishments.	Yes	Commercial supply contract, MSA Declaration, NFAS Agents Declaration, NFAS Delivery Docket or Form B, NLIS Movement Update, NVD, Processing plant production management system, State specific movement forms	
Movement time	This is the time at which cattle were moved from the property (PIC) of origin. Direct consignments travelling to processors by road must be slaughtered with 48 hours of dispatch.	Yes	MSA Declaration, Processing plant production management system	
MSA Declaration Serial Number	Each MSA Declaration form has a unique serial number.	Yes	MSA Declaration, Processing plant production management system	For more information on MSA visit the MLA website.
MSA Licence Number	Any establishment consigning, supplying, or identifying MSA Certified Product must be registered and have a unique MSA Licence Number.	Yes	MSA Declaration, Processing plant production management system, Receipt of purchase/Tax Invoice	For more information on MSA visit the MLA website.
NFAS Accreditation Number	This is a unique number given to accredited feedlots certified under the National Feedlot Accreditation Scheme (NFAS).	Yes	NFAS Delivery Docket or Form B, Processing plant production management system	For more information visit the AUS-MEAT website.
NFAS Delivery Docket Number	Each NFAS document has a unique number or identity code.	Yes	NFAS Agents Declaration, Processing plant production management system	For more information visit the AUS-MEAT website.
NLIS Tag Number/RFID	All animals transported between PICs must have a permanent National Livestock Identification System tag attached. This tag has a unique animal identification number.	Yes	NLIS Movement Update, Processing plant production management system	For more information visit the Integrity systems website.
NVD Serial Number	Each NVD form has a unique serial number.	Yes	NFAS Delivery Docket or Form B, NLIS Movement Update, NVD, Post Sale Summary, Processing plant production management system	For more information visit the Integrity systems website.
Producer/Vendor MSA Registration Number	Producers consigning cattle to MSA markets are required to be registered	Yes	MSA Declaration, Processing plant production management system	For more information on MSA visit the MLA website.

	and have a unique MSA Registration Number.			
Quality Assurance Officer (QAO) Certificate Number	A unique number issued to personnel issued with a Statement of Authority for demonstrating skills for compliance with meeting NFAS Rules and Standards.	Yes	NFAS Delivery Docket or Form B, Processing plant production management system	For more information visit the AUS-MEAT website.
Recipient Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Processing plant production management system, Receipt of purchase/Tax Invoice	For more information visit the ATO website.
Seller/Supplier Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Feed and water record, Processing plant production management system, Receipt of purchase/Tax Invoice	For more information visit the ATO website.
To PIC	The Property Identification Code from/to where the livestock or product were consigned.	Yes	NLIS Movement Update, NVD, Post Sale Summary, Processing plant production management system, State specific movement forms	For more information visit the Integrity systems website.
Transport registration number	The registration number of the vehicle in which the animals or product were transported. For shipments of product this will be a shipping container number.	Yes	NVD, Processing plant production management system	
Treatment date	The date on which a treatment or product was applied to a unit e.g., paddock, animal, fodder etc.	Yes	Feed and water record, NVD, Processing plant production management system	

5.2.2.1.5 Regulatory and Industry Programs

- * AUS-MEAT
- * Australian Meat Industry Council (AMIC)
- * Department of Agriculture
- * eNVD
- * Livestock Production Assurance (LPA)
- * Meat Standards Australia (MSA)
- * National Livestock Identification System (NLIS)
- * Other data sources

5.2.2.1.6 Supply Chain Node Traceability

The National Livestock Identification System (NLIS) is the Australian livestock traceability program which is administered by Integrity Systems Company (ISC). Where stipulated by State legislation and certain export markets, the NLIS system requires all animals bought, sold, and moved along the supply chain to be tagged with an accredited NLIS ID tag. Each tag has an NLIS tag number or Radio Frequency Identifier (RFID) for the

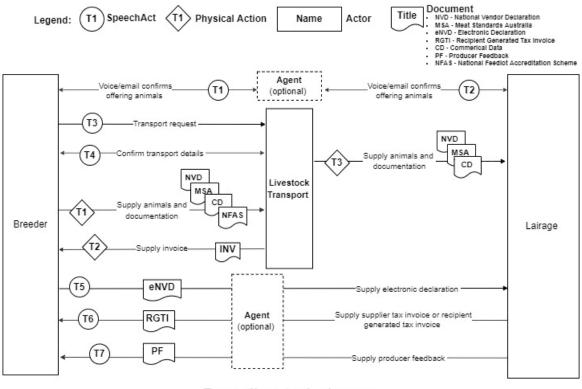
traceability of the animal throughout its lifetime. Every property which holds livestock must have a Property Identification Code (PIC) to which the livestock are assigned in the NLIS Database. Each time livestock are transferred between PICs within Australia they must be accompanied by a livestock movement declaration, such as the National Vendor Declaration (NVD) form. This document typically outlines the transporter details, consignment details, compliance with intended market specifications, withholding periods, and the details of the new property PIC. All livestock movements between PICs require an NLIS movement update to be made by either or both the consigner and receiver. Where NLIS ID tags are lost livestock must be issued with a new post-breeder tag if not on the PIC of birth and this reconciled in the NLIS Database.

5.2.2.1.7 Data flow diagrams

Direction	Description
Input	Breeding to Lairage
Input	Backgrounding to Lairage
Input	Finishing -grass/grain to Lairage - over the hooks (direct consignment)
Input	Finishing -grass/grain to Lairage - company owned
Input	Finishing -grass/grain to Lairage - 3rd party kill or operator
Input	Saleyard to Lairage
Output	Lairage to Slaughter
Output	Lairage to Render - condemn or dead on arrival

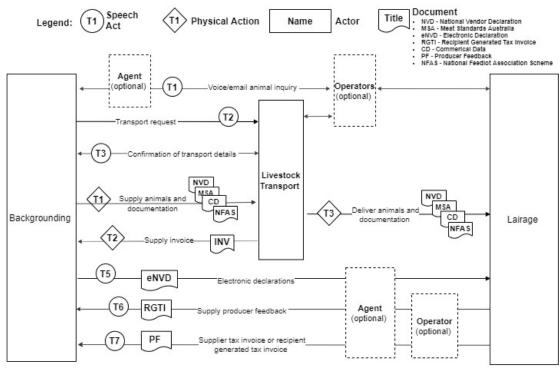
Table 40. Data flow diagrams for the inputs and outputs of a beef lairage system.

5.2.2.1.7.1 Breeding to Lairage



Breeding to Lairage

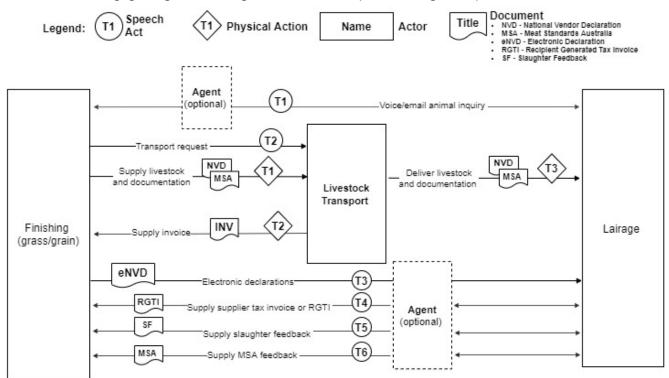
Figure 40. Data or information flows from the breeding to lairage systems in the beef supply chain.



5.2.2.1.7.2 Backgrounding to Lairage

Backgrounding to Lairage

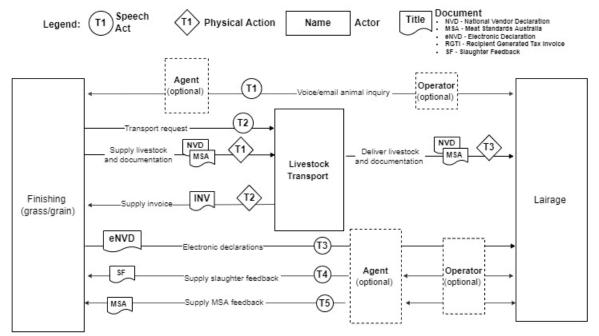
Figure 41. Data or information flows from the backgrounding to lairage systems in the beef supply chain.



5.2.2.1.7.3 Finishing -grass/grain to Lairage - over the hooks (direct consignment)

Finishing - grass/grain to Lairage (over the hooks)

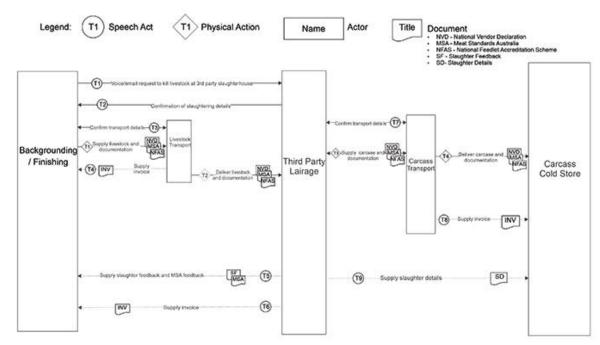
Figure 42. Data or information flows from the finishing-grass/grain to lairage (Over-The-Hooks) systems in the beef supply chain.



5.2.2.1.7.4 Finishing -grass/grain to Lairage - company owned

Finishing - grass/grain to Lairage (company owned)

Figure 43. Data or information flows from the finishing-grass/grain to lairage (company owned) systems in the beef supply chain.



5.2.2.1.7.5 Finishing -grass/grain to Lairage - 3rd party kill or operator

Feedlot to Lairage 3rd Party Kill

Figure 44. Data or information flows from the finishing-grass/grain to lairage (3rd party kill or operator) systems in the beef supply chain.

5.2.2.1.7.6 Saleyard to Lairage

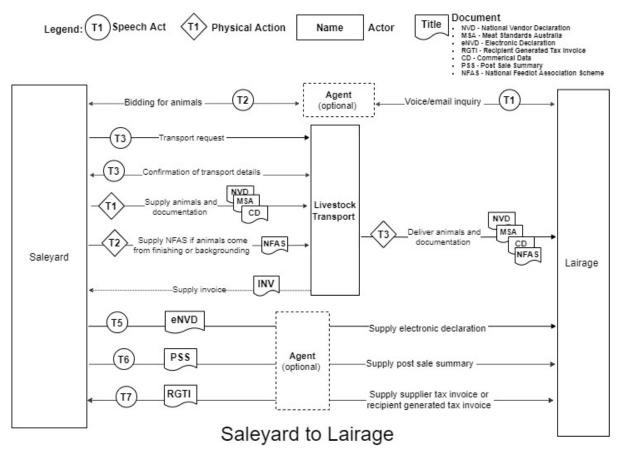
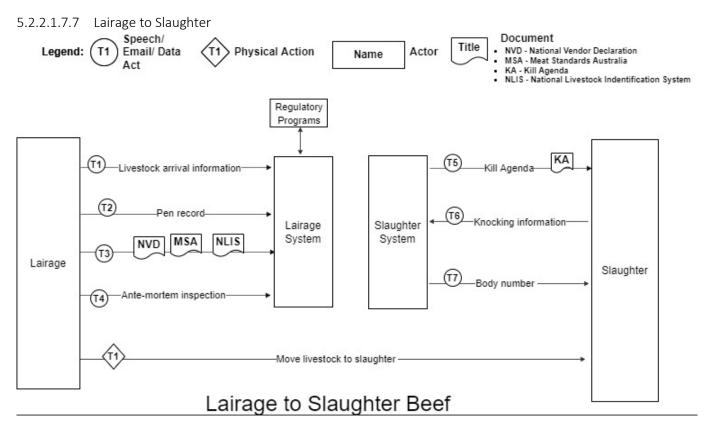
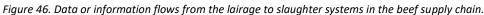
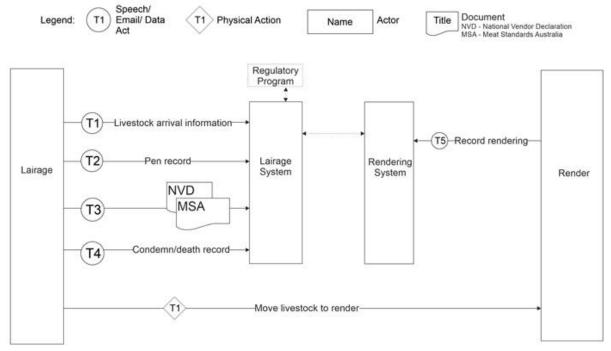


Figure 45. Data or information flows from the saleyard to lairage systems in the beef supply chain.







5.2.2.1.7.8 Lairage to Render - condemn or dead on arrival

Lairage to Render - Condemns and Dead on arrival/ in pen

Figure 47. Data or information flows from the lairage to render (condemn or dead on arrival) systems in the beef supply chain.

5.2.2.2 Slaughter

Slaughter is the term which collectively describes a number of processes that begin with the slaughter of the live animal and end with a dressed carcase whereby the head, hide, legs, tail and viscera have been removed. These processes include the stunning, bleeding, evisceration, inspection, trimming and ticketing of carcasses. Towards the end of the slaughter process, each carcase is issued a carcase ticket with a unique serialised identifier. This identifier allows the forward and backward traceability of the carcase through the value chain, being correlated to the live animal NLIS tag number and remaining with the carcase until it is boned into cartoned product and receives a serialised carton label.

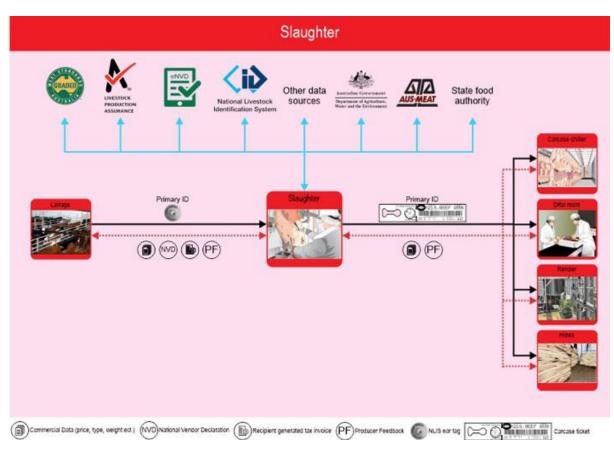


Figure 48. Inputs and outputs of the beef supply chain slaughter sector.

5.2.2.2.1 Physical Inputs including Critical Tracking Events (CTEs)

The slaughter process is carefully done to ensure that the animal is killed correctly and humanely and to increase efficiency. Live cattle from lairage, which have been passed for slaughter at ante mortem inspection by an Authorised Officer, are physical inputs into the slaughter system.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with inputs to the slaughter system include the receival of:

* Cattle.

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Cattle	These are bovine	Commercial supply contract, Feed and water record, MSA	
	livestock and may	Declaration, NFAS Agents Declaration, NFAS Delivery Docket or	
	include any type of	Form B, NLIS Movement Update, NVD, Post Sale Summary,	
	cattle e.g., cull	Processing plant production management system, Receipt of	
	cattle, calves etc.	purchase/Tax Invoice, State specific movement Forms	

Table 41. Physical inputs and associated Critical Tracking Event related documents for a beef slaughter system.

5.2.2.2.2 Information Inputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). Information inputs for slaughter are those which are carried through from lairage and associated with critical movement documentation.

Table 42. Information inputs, Key Data Elements and Critical Tracking Event related documentation for a beef slaughter system.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Agreement date	This is the date on which an agreement between two parties was made.	Yes	Commercial supply contract, Processing plant production management system	
APVMA approval number	This is a unique number allocated to each label by the APVMA.	Yes	NVD, Processing plant production management system	For information On veterinary drugs and chemicals look at the AVPMA website.
Batch number	This is a unique number which identifies products sharing certain production characteristics and is used for traceability purposes.	Yes	NVD, Processing plant production management system	
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Processing plant production management system, Receipt of purchase/Tax Invoice	
Contract number	This is a unique number allocated to the contract by the seller.	Yes	Commercial supply contract, Processing plant production management system	
Date	This is the date of signing or of which a record entry or transaction was made.	Yes	Commercial supply contract, Feed and water record, MSA Declaration, NFAS Agents Declaration, NFAS Delivery Docket or Form B, NVD, Post Sale Summary, Processing plant production management system, Receipt of purchase/Tax Invoice, State specific movement forms	

From PIC	The Property Identification	Yes	MSA Declaration, NFAS Delivery	For more
-	Code from/to where the livestock or product were consigned.		Docket or Form B, NLIS Movement Update, NVD, Post Sale Summary, Processing plant production management system, State specific movement forms	information visit the Integrity systems website.
Lot number	A lot is a number assigned by the processor to each group of cattle consigned to slaughter and is usually vendor specific.	Yes	Processing plant production management system	
Movement date	The date on which livestock or other products (e.g., feed or meat products) were transported between PICs/establishments.	Yes	Commercial supply contract, MSA Declaration, NFAS Agents Declaration, NFAS Delivery Docket or Form B, NLIS Movement Update, NVD, Processing plant production management system, State specific movement forms	
Movement time	This is the time at which cattle were moved from the property (PIC) of origin. Direct consignments travelling to processors by road must be slaughtered with 48 hours of dispatch.	Yes	MSA Declaration, Processing plant production management system	
MSA Declaration Serial Number	Each MSA Declaration form has a unique serial number.	Yes	MSA Declaration, Processing plant production management system	For more information on MSA visit the MLA website.
MSA Licence Number	Any establishment consigning, supplying, or identifying MSA Certified Product must be registered and have a unique MSA Licence Number.	Yes	MSA Declaration, Processing plant production management system, Receipt of purchase/Tax Invoice	For more information on MSA visit the MLA website.
NFAS Accreditation Number	This is a unique number given to accredited feedlots certified under the National Feedlot Accreditation Scheme (NFAS).	Yes	NFAS Delivery Docket or Form B, Processing plant production management system	For more information visit the AUS-MEAT website.
NFAS Delivery Docket Number	Each NFAS document has a unique number or identity code.	Yes	NFAS Agents Declaration, Processing plant production management system	For more information visit the AUS-MEAT website.
NLIS Tag Number/RFID	All animals transported between PICs must have a permanent National Livestock Identification System tag attached. This tag has a unique animal identification number.	Yes	NLIS Movement Update, Processing plant production management system	For more information visit the Integrity systems website.

NVD Serial Number	Each NVD form has a	Yes	NFAS Delivery Docket or Form B,	For more
	unique serial number.	103	NLIS Movement Update, NVD, Post	information
			Sale Summary, Processing plant	visit the Integrity
			production management system	systems
			production management system	website.
Producer/Vendor	Producers consigning	Yes	MSA Declaration, Processing plant	For more
MSA Registration	cattle to MSA markets are		production management system	information on MSA visit
Number	required to be registered			the MLA
	and have a unique MSA			website.
	Registration Number.			
Quality Assurance	A unique number issued to	Yes	NFAS Delivery Docket or Form B,	For more
Officer (QAO)	personnel issued with a		Processing plant production	information visit the
Certificate Number	Statement of Authority for		management system	AUS-MEAT
	demonstrating skills for			website.
	compliance with meeting			
	NFAS Rules and Standards.			
Recipient Australian	This is an 11-digit	Yes	Processing plant production	For more information
Business Number	registration number,		management system, Receipt of	visit the ATO
(ABN)	issued by the Australian		purchase/Tax Invoice	website.
	Tax Office, used to identify			
	businesses.			
Seller/Supplier	This is an 11-digit	Yes	Feed and water record, Processing	For more information
Australian Business	registration number,		plant production management	visit the ATO
Number (ABN)	issued by the Australian		system, Receipt of purchase/Tax	website.
	Tax Office, used to identify		Invoice	
	businesses.			F
To PIC	The Property Identification	Yes	NLIS Movement Update, NVD, Post	For more information
	Code from/to where the		Sale Summary, Processing plant	visit the
	livestock or product were		production management system,	Integrity
	consigned.		State specific movement forms	<u>systems</u> website.
Transport	The registration number of	Yes	NVD, Processing plant production	WODONO.
registration number	the vehicle in which the		management system	
	animals or product were			
	transported. For			
	-			
	container number.			
Treatment date	The date on which a	Yes	Feed and water record, NVD,	
	treatment or product was			
	•			
	etc.			
Treatment date	shipments of product this will be a shipping container number. The date on which a treatment or product was applied to a unit e.g., paddock, animal, fodder	Yes	Feed and water record, NVD, Processing plant production management system	

5.2.2.2.3 Physical Outputs including Critical Tracking Events (CTEs)

The physical outputs from the slaughter process include carcases and offal passed by Authorised Officers for human consumption, as well as condemned carcases, carcase parts and offal. This product cannot be processed and sold for human consumption.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with the outputs of the slaughter system include the movement of:

- * Carcase
- * Offal
- * Hide/Skin
- * Condemned carcase
- * Condemned carcase parts
- * Condemned offal

off the property, premises, or supply chain sector.

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Carcase	The body of a slaughtered animal after bleeding. Becomes a dressed carcase when hide, head, feet and offal are removed.	Carcase Ticket, MSA Data Capture Unit/myMSA, NLIS Movement Update, Processing plant production management system	
Offal	The organs of the thoracic and abdominal cavities, the brain, the muscular tissues of the head and diaphragm, the tail, feet or tendons.	Processing plant production management system	
Hide/Skin	The pelt of the animal. Typically referred to as 'hide' for larger animals e.g., cattle and 'skin' for smaller animals e.g., sheep, calves.	Processing plant production management system	
Condemned carcase	The body of a slaughtered animal deemed unfit for human consumption. This may be a condemned dressed carcase when hide, head, feet and offal are removed.	Carcase Ticket, Processing plant production management system	
Condemned carcase parts	Any tissue or structure removed from a slaughtered animal deemed unfit for human consumption. These parts may include the head, viscera, offal, musculature, and blood. NOTE: condemned offal is treated as a separate item here.	Processing plant production management system	
Condemned offal	Offal tissues deemed unfit for human consumption.	Processing plant production management system	

5.2.2.2.4 Information Outputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). Information outputs from slaughter are derived principally from carcase tickets which include regulated information for traceability purposes. This information is linked to that received in lairage through the processing production management system.

Table 44. Information outputs, Key Data Elements and Critical Tracking Event related documentation for a beef slaughter system.

Attributes (including KDEs)Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related	More details
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			documents (including electronic)	
Batch number	This is a unique number which identifies products sharing certain production characteristics and is used for traceability purposes.	Yes	Processing plant production management system, Carcase Ticket, Processing plant production management system	
From Establishment number	A number issued by Federal and State Authorities to identify the originating site from which meat or meat products were distributed to domestic or export markets. For transfer certificates, the Establishment numbers for both the dispatching and receiving establishments are recorded.	Yes	Carcase Ticket, Processing plant production management system	For more information visit the Department of Agriculture, Water and the Environment website.
From PIC	The Property Identification Code from/to where the livestock or product were consigned.	Yes	NLIS Movement Update, Processing plant production management system	For more information visit the Integrity systems website.
Global Trade Item Number (GTIN)	Encoded in the GS1 barcode, the GTIN is a globally unique 14-digit number used to identify trade items, products, or services.	Yes	Carcase Ticket, Processing plant production management system	For more information visit the GS1 website.
Lot number	A lot is a number assigned by the processor to each group of cattle consigned to slaughter and is usually vendor specific.	Yes	MSA Data Capture Unit/myMSA, Carcase Ticket, Processing plant production management system	
Movement date	The date on which livestock or other products (e.g., feed or meat products) were transported between PICs/establishments.	Yes	NLIS Movement Update, Processing plant production management system	
MSA Declaration Serial Number	Each MSA Declaration form has a unique serial number.	Yes	MSA Data Capture Unit/myMSA, Processing plant production management system	For more information on MSA visit the MLA website.
MSA Licence Number	Any establishment consigning, supplying, or identifying MSA Certified Product must be	Yes	MSA Data Capture Unit/myMSA,	For more information on MSA visit the MLA website.

	registered and have a unique MSA Licence Number.		Processing plant production management system	
Net Weight (Kilograms)	Usually encoded in the GS1 barcode, the Net Weight is a variable measure of the trade item e.g., carton, pallet or shipment recorded in kilograms.	Yes	Carcase Ticket, Processing plant production management system	For more information visit the GS1 website.
NLIS Tag Number/RFID	All animals transported between PICs must have a permanent National Livestock Identification System tag attached. This tag has a unique animal identification number.	Yes	MSA Data Capture Unit/myMSA, NLIS Movement Update, Processing plant production management system	<u>For more</u> <u>information visit</u> <u>the Integrity</u> <u>systems</u> <u>website.</u>
NVD Serial Number	Each NVD form has a unique serial number.	Yes	NLIS Movement Update, Processing plant production management system	For more information visit the Integrity systems website.
Official mark	Any stamp, seal, label, or mark that is declared by the regulations to be an official mark. An official mark signifies that the product has been inspected by and approved as safe for human consumption by an Authorised Officer.	Yes	Carcase Ticket	<u>For more</u> information visit the Australian <u>Government</u> Federal <u>Register of</u> Legislation.
Producer/Vendor MSA Registration Number	Producers consigning cattle to MSA markets are required to be registered and have a unique MSA Registration Number.	Yes	MSA Data Capture Unit/myMSA, Processing plant production management system	For more information on MSA visit the MLA website.
Production Date (YYMMDD)	Encoded in the GS1 barcode, this is the 'kill' or slaughter' date of the product and is recorded in the format year, month, day (YYMMDD).	Yes	Carcase Ticket, Processing plant production management system	For more information visit the GS1 website.
Serial Number	Encoded in the GS1 barcode, this is a code, numeric or alphanumeric, assigned to an individual instance of an item for its lifetime.	Yes	Carcase Ticket, Processing plant production management system	For more information visit the GS1 website.
Slaughter or processing date	This is the date on which livestock were slaughtered by the processor or the day on which carcases were processed (if different to slaughter date).	Yes	MSA Data Capture Unit/myMSA, NLIS Movement Update, Processing plant	

			production management system	
To PIC	The Property Identification Code from/to where the livestock or product were consigned.	Yes	NLIS Movement Update, Processing plant production management system	<u>For more</u> information visit the Integrity systems website.
Trade description	This is a collective set of words that says what the product is and may include information such as species, net weight of product, name and address of establishments, category ciphers, market endorsements, MSA eating quality etc.	Yes	Carcase Ticket, Processing plant production management system	

5.2.2.5 Regulatory and Industry Programs

- * AUS-MEAT
- * Australian Meat Industry Council (AMIC)
- * Department of Agriculture
- * eNVD
- * Livestock Production Assurance (LPA)
- * Meat Standards Australia (MSA)
- * National Livestock Identification System (NLIS)
- * State food authority
- * Other data sources

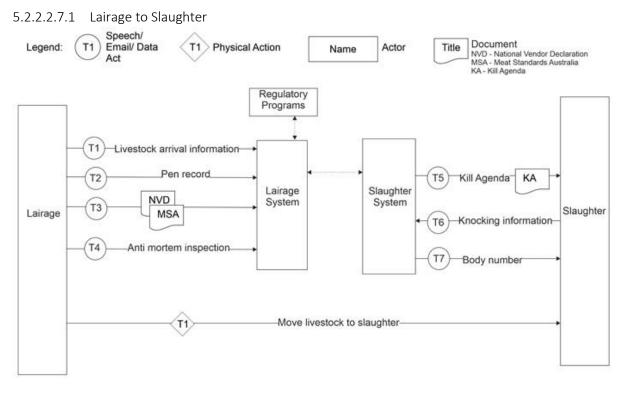
5.2.2.2.6 Supply Chain Node Traceability

The National Livestock Identification System (NLIS) is the Australian livestock traceability program which is administered by Integrity Systems Company (ISC). Where stipulated by State legislation and certain export markets, the NLIS system requires all animals bought, sold, and moved along the supply chain to be tagged with an accredited NLIS ID tag. Each tag has an NLIS tag number or Radio Frequency Identifier (RFID) for the traceability of the animal throughout its lifetime. Every property which holds livestock must have a Property Identification Code (PIC) to which the livestock are assigned in the NLIS Database. Each time livestock are transferred between PICs within Australia they must be accompanied by a livestock movement declaration, such as the National Vendor Declaration (NVD) form. This document typically outlines the transporter details, consignment details, compliance with intended market specifications, withholding periods, and the details of the new property PIC. All livestock movements between PICs require an NLIS movement update to be made by either or both the consigner and receiver. Where NLIS ID tags are lost livestock must be issued with a new post-breeder tag if not on the PIC of birth and this reconciled in the NLIS Database. Once animals are slaughtered, carcases are issued with a carcase ticket which contains key information correlating with the NLIS tag number or RFID. This key information, including GS1 meat industry barcode, body number, processing establishment number and production date or 'kill date' must be uploaded to the NLIS Database.

5.2.2.2.7 Data flow diagrams

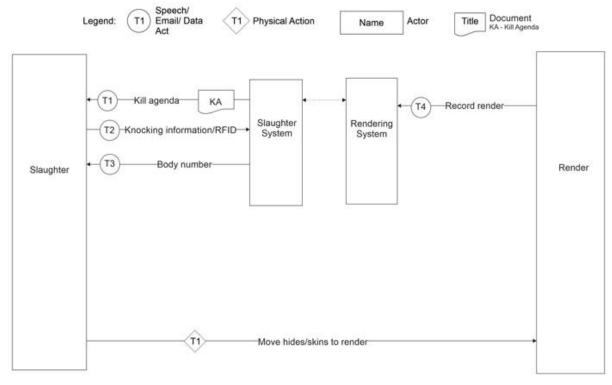
Table 45. Data flow diagrams for the inputs and outputs of a beef slaughter system.

Direction	Description
Input	Lairage to Slaughter
Output	Slaughter to Render - Hides and Skins
Output	Slaughter to Render - Not Fit for Human Consumption
Output	Slaughter to Offal room
Output	Slaughter to Chiller



Lairage to Slaughter Beef

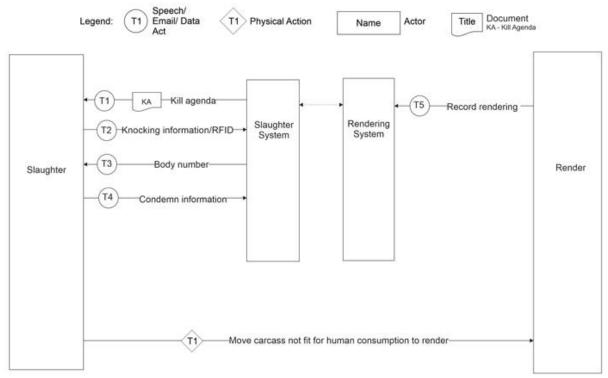
Figure 49. Data or information flows from the lairage to slaughter systems in the beef supply chain.



5.2.2.7.2 Slaughter to Render - Hides and Skins

Slaughter to Render -Hides/Skins

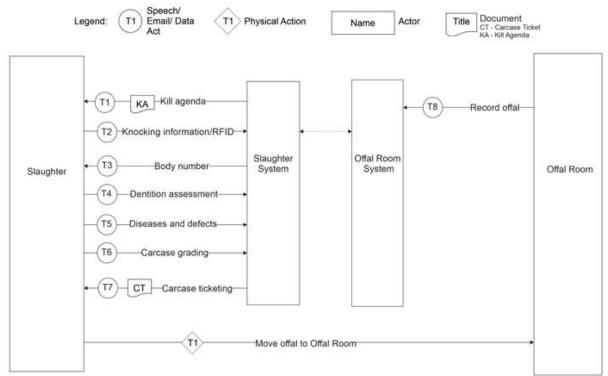
Figure 50. Data or information flows from the slaughter to render (hides and skins) systems in the beef supply chain.



5.2.2.2.7.3 Slaughter to Render - Not Fit for Human Consumption

Slaughter to Render-Not Fit for Human Consumption

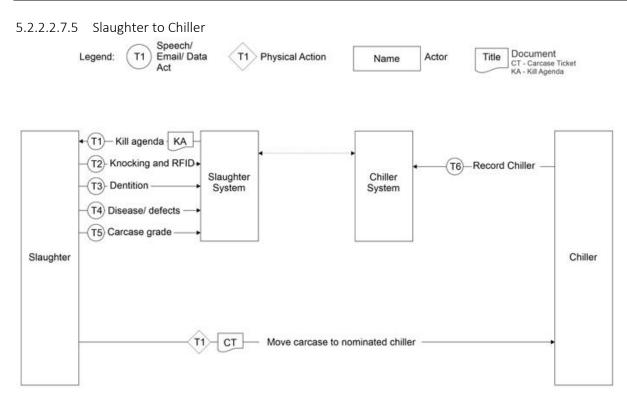
Figure 51. Data or information flows from the slaughter to render (not fit for human consumption) systems in the beef supply chain.



5.2.2.7.4 Slaughter to Offal room

Slaughter to Offal Room

Figure 52. Data or information flows from the slaughter to offal room systems in the beef supply chain.



Slaughter to Chiller

Figure 53. Data or information flows from the slaughter to chiller systems in the beef supply chain.

5.2.2.3 Carcase chiller

Once the slaughter process is complete, carcases are transferred into the carcase chiller in order to maintain and ensure product wholesomeness (safe to eat and aesthetically pleasing). The Australian standard requires all carcases to be placed under refrigeration conditions for chilling or freezing within two hours of slaughter. Carcases must be chilled to no more than 7 degrees Celsius within a period of 24 hours. Additionally, it is essential that hot carcases do not enter the same carcase chiller containing already chilled product. This is to ensure meat safety.

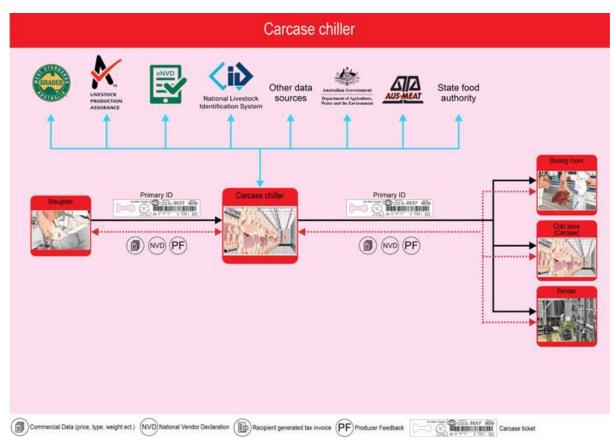


Figure 54. Inputs and outputs of the beef supply chain carcase chiller sector.

5.2.2.3.1 Physical Inputs including Critical Tracking Events (CTEs)

The physical inputs for carcase chillers include the carcases themselves with the Critical Tracking Event related documents including those which include important traceability information such as the carcase ticket.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with inputs to the carcase chiller system include the receival of:

* Carcase.

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Carcase	The body of a slaughtered animal after bleeding. Becomes a dressed carcase when hide, head, feet and offal are removed.	Carcase Ticket, MSA Data Capture Unit/myMSA, Processing plant production management system	

Table 46. Physical inputs and associated Critical Tracking Event related documents for a beef carcase chiller system.

5.2.2.3.2 Information Inputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). There are a number of information inputs associated with the movement of carcases into

the carcase chiller system. These are largely included on the carcase ticket and are Key Data Elements encapsulated by the GS1 barcode, as well as other information required by federal legislation.

Table 47. Information inputs, Key Data Elements and Critical Tracking Event related documentation for a beef carcase chiller system.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Body number	This is a number assigned to each carcase by the processor for identification purposes.	Yes	Carcase Ticket, MSA Data Capture Unit/myMSA, Processing plant production management system	
From Establishment number	A number issued by Federal and State Authorities to identify the originating site from which meat or meat products were distributed to domestic or export markets. For transfer certificates, the Establishment numbers for both the dispatching and receiving establishments are recorded.	Yes	Carcase Ticket, Processing plant production management system	
Global Trade Item Number (GTIN)	Encoded in the GS1 barcode, the GTIN is a globally unique 14-digit number used to identify trade items, products, or services.	Yes	Carcase Ticket, Processing plant production management system	For more information visit the GS1 website.
Lot number	A lot is a number assigned by the processor to each group of cattle consigned to slaughter and is usually vendor specific.	Yes	MSA Data Capture Unit/myMSA, Processing plant production management system	
MSA Declaration Serial Number	Each MSA Declaration form has a unique serial number.	Yes	MSA Data Capture Unit/myMSA, Processing plant production management system	For more information on <u>MSA visit the</u> <u>MLA website.</u>
MSA Licence Number	Any establishment consigning, supplying, or identifying MSA Certified Product must be registered and have a unique MSA Licence Number.	Yes	MSA Data Capture Unit/myMSA, Processing plant production management system	For more information on MSA visit the MLA website.

Net Weight (Kilograms)	Usually encoded in the GS1 barcode, the Net Weight is a variable measure of the trade	Yes	Carcase Ticket, Processing plant	For more information visit
(Riograms)	item e.g., carton, pallet or shipment recorded in kilograms.		production management system	<u>the GS1</u> <u>website.</u>
NLIS Tag Number/RFID	All animals transported between PICs must have a permanent National Livestock Identification System tag attached. This tag has a unique animal identification number.	Yes	MSA Data Capture Unit/myMSA, Processing plant production management system	For more information visit the Integrity systems website.
Official mark	Any stamp, seal, label, or mark that is declared by the regulations to be an official mark. An official mark signifies that the product has been inspected by and approved as safe for human consumption by an Authorised Officer.	Yes	Carcase Ticket	For more information visit the Australian Government Federal Register of Legislation.
Producer/Vendor MSA Registration Number	Producers consigning cattle to MSA markets are required to be registered and have a unique MSA Registration Number.	Yes	MSA Data Capture Unit/myMSA, Processing plant production management system	For more information on MSA visit the MLA website.
Production Date (YYMMDD)	Encoded in the GS1 barcode, this is the 'kill' or slaughter' date of the product and is recorded in the format year, month, day (YYMMDD).	Yes	Carcase Ticket, Processing plant production management system	For more information visit the GS1 website.
Serial Number	Encoded in the GS1 barcode, this is a code, numeric or alphanumeric, assigned to an individual instance of an item for its lifetime.	Yes	Carcase Ticket, Processing plant production management system	For more information visit the GS1 website.
Slaughter or processing date	This is the date on which livestock were slaughtered by the processor or the day on which carcases were processed (if different to slaughter date).	Yes	MSA Data Capture Unit/myMSA, Processing plant production management system	
Trade description	This is a collective set of words that says what the product is and may include information such as species, net weight of product, name and address of establishments, category ciphers, market endorsements, MSA eating quality etc.	Yes	Carcase Ticket, Processing plant production management system	

5.2.2.3.3 Physical Outputs including Critical Tracking Events (CTEs)

The physical outputs of the carcase chiller system include carcases passed as safe for human consumption as well as any carcases previously identified as requiring a further disposition and deemed unfit for consumption (condemned carcases).

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with the outputs of the carcase chiller system include the movement of:

- * Carcase
- * Condemned carcase

off the property, premises, or supply chain sector.

Table 18 Physical outputs and associated	Critical Tracking Event related	documents for a heaf carcase chiller system
Tuble 48. Filysical balpats and associated	Childen Hucking Event related	documents for a beef carcase chiller system.

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Carcase	The body of a slaughtered animal after bleeding. Becomes a dressed carcase when hide, head, feet and offal are removed.	Carcase Ticket, MSA Carcase Ticket, MSA Data Capture Unit/myMSA, Processing plant production management system	
Condemned carcase	The body of a slaughtered animal deemed unfit for human consumption. This may be a condemned dressed carcase when hide, head, feet and offal are removed.	Carcase Ticket, Processing plant production management system	

5.2.2.3.4 Information Outputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). The information outputs relating to the movement of carcases out of the chiller system is largely the same as for the movement of carcases into the chiller system. This information can predominantly be found on the carcase ticket and will be stored in the processing plants production management system.

Table 49. Information outputs, Key Data Elements and Critical Tracking Event related documentation for a beef carcase chiller system.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Body number	This is a number assigned to each carcase by the processor for identification purposes.	Yes	Carcase Ticket, MSA Data Capture Unit/myMSA, Processing plant production management system	
From Establishment number	A number issued by Federal and State Authorities to identify the originating site from which meat or meat products were distributed to domestic or export markets. For	Yes	Carcase Ticket, Processing plant production	

	transfer certificates, the Establishment numbers for both the dispatching and receiving establishments are recorded.		management system	
Global Trade Item Number (GTIN)	Encoded in the GS1 barcode, the GTIN is a globally unique 14-digit number used to identify trade items, products, or services.	Yes	Carcase Ticket, Processing plant production management system	For more information visit the GS1 website.
Lot number	A lot is a number assigned by the processor to each group of cattle consigned to slaughter and is usually vendor specific.	Yes	MSA Data Capture Unit/myMSA, Processing plant production management system	
MSA Declaration Serial Number	Each MSA Declaration form has a unique serial number.	Yes	MSA Data Capture Unit/myMSA, Processing plant production management system	For more information on MSA visit the MLA website.
MSA Licence Number	Any establishment consigning, supplying, or identifying MSA Certified Product must be registered and have a unique MSA Licence Number.	Yes	MSA Data Capture Unit/myMSA, Processing plant production management system	For more information on MSA visit the MLA website.
Net Weight (Kilograms)	Usually encoded in the GS1 barcode, the Net Weight is a variable measure of the trade item e.g., carton, pallet or shipment recorded in kilograms.	Yes	Carcase Ticket, Processing plant production management system	For more information visit the GS1 website.
NLIS Tag Number/RFID	All animals transported between PICs must have a permanent National Livestock Identification System tag attached. This tag has a unique animal identification number.	Yes	MSA Data Capture Unit/myMSA, Processing plant production management system	For more information visit the Integrity systems website.
Official mark	Any stamp, seal, label, or mark that is declared by the regulations to be an official mark. An official mark signifies that the product has been inspected by and approved as safe for human consumption by an Authorised Officer.	Yes	Carcase Ticket	<u>For more</u> information visit the Australian <u>Government</u> <u>Federal</u> <u>Register of</u> <u>Legislation.</u>
Producer/Vendor MSA Registration Number	Producers consigning cattle to MSA markets are required to be registered and have a unique MSA Registration Number.	Yes	MSA Data Capture Unit/myMSA, Processing plant production	<u>For more</u> information on <u>MSA visit the</u> <u>MLA website.</u>

Production Date (YYMMDD)	Encoded in the GS1 barcode, this is the 'kill' or slaughter' date of the product and is recorded in the format year, month, day (YYMMDD).	Yes	management system Carcase Ticket, Processing plant production management system	For more information visit the GS1 website.
Serial Number	Encoded in the GS1 barcode, this is a code, numeric or alphanumeric, assigned to an individual instance of an item for its lifetime.	Yes	Carcase Ticket, Processing plant production management system	For more information visit the GS1 website.
Slaughter or processing date	This is the date on which livestock were slaughtered by the processor or the day on which carcases were processed (if different to slaughter date).	Yes	MSA Data Capture Unit/myMSA, Processing plant production management system	
Trade description	This is a collective set of words that says what the product is and may include information such as species, net weight of product, name and address of establishments, category ciphers, market endorsements, MSA eating quality etc.	Yes	Carcase Ticket, Processing plant production management system	

5.2.2.3.5 Regulatory and Industry Programs

- * AUS-MEAT
- * Australian Meat Industry Council (AMIC)
- * Department of Agriculture
- * eNVD
- * Livestock Production Assurance (LPA)
- * Meat Standards Australia (MSA)
- * National Livestock Identification System (NLIS)
- * State food authority
- * Other data sources

5.2.2.3.6 Supply Chain Node Traceability

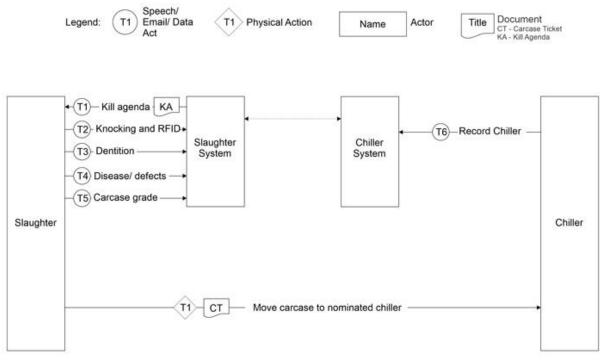
Traceability of whole carcases back to the live animal is possible and can be done by the processing establishment where the animal was slaughtered. Here, carcases are issued a carcase ticket which correlates to the live animal identifier and contains key information, including GS1 meat industry barcode, body number, processing establishment number and production date or 'kill date'. This information is uploaded to the NLIS Database, by the processor, under the processing establishments Property Identification Code (PIC). Thus, whole carcases (identified with a unique serialised carcase ticket) within a processing facility, chiller, cold store, or that are loaded for export or transport to other premises (e.g., retail) are fully traceable back to the individual live animal and property of origin.

5.2.2.3.7 Data flow diagrams

Table 50. Data flow diagrams for the inputs and outputs of a beef carcase chiller system.

Direction	Description
Input	Slaughter to Carcase Chiller
Output	Carcase chiller to Boning room
Output	Carcase chiller to Carcase Chill Store
Output	Carcase chiller to Render

5.2.2.3.7.1 Slaughter to Carcase Chiller



Slaughter to Chiller

Figure 55. Data or information flows from the slaughter to chiller systems in the beef supply chain.

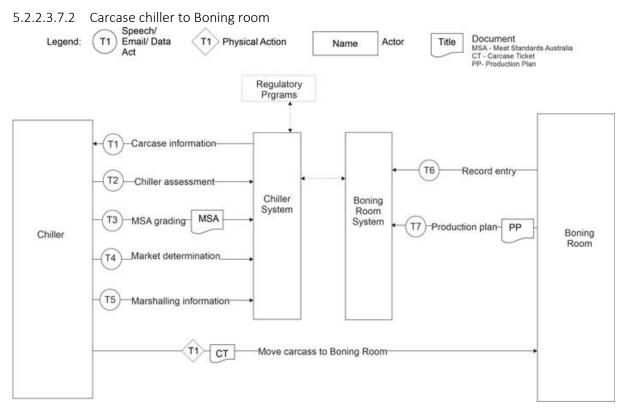
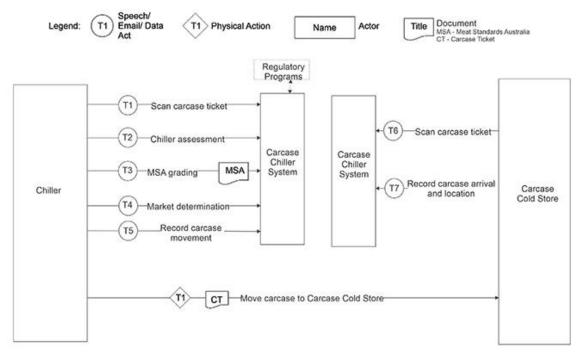


Figure 56. Data or information flows from the chiller to boning room systems in the beef supply chain.

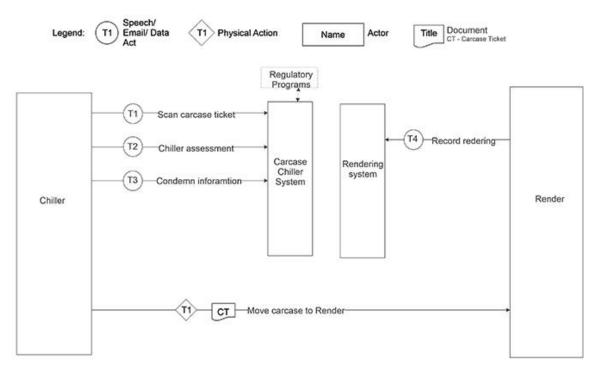
5.2.2.3.7.3 Carcase chiller to Carcase Chill Store



Chiller to Carcase Cold Store

Figure 57. Data or information flows from the chiller to carcase cold store systems in the beef supply chain.

5.2.2.3.7.4 Carcase chiller to Render



Carcase Chiller to Render

Figure 58. Data or information flows from the chiller to render systems in the beef supply chain.

5.2.2.4 Boning room

Boning is a process or procedure whereby meat is removed from carcases or carcase parts, or bone-in or boneless meat cuts are produced. The boning room is the location where these activities occur. Typically, carcases enter the boning room after chilling and are broken down into portions and cuts such as primal, sub-primal and trim cuts. This process is very critical, as any errors in cutting can decrease the value of a cut and impact directly on profit. Additionally, there is a high risk of cross contamination to the cuts, and health and safety risks to workers operating the boning room tools and machinery.

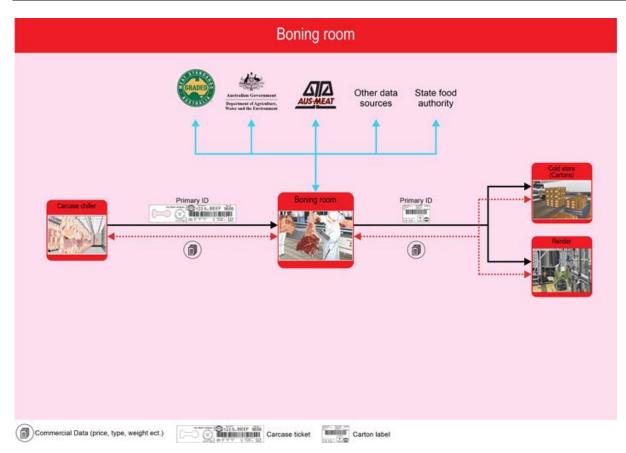


Figure 59. Inputs and outputs of the beef supply chain boning room sector.

5.2.2.4.1 Physical Inputs including Critical Tracking Events (CTEs)

Physical inputs into the boning room related to product traceability are those carcases transferred out of the carcase chiller system. This includes the CTE documentation such as the carcase ticket.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with inputs to the boning room system include the receival of:

* Carcase.

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Carcase	The body of a slaughtered animal after bleeding. Becomes a dressed carcase when hide, head, feet and offal are removed.	Carcase Ticket, MSA Carcase Ticket, Processing plant production management system	

Table 51. Physical inputs and associated Critical Tracking Event related documents for a beef boning room system.

5.2.2.4.2 Information Inputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). The information inputs associated with the movement of carcases into the boning room can

largely be found on the carcase ticket. This may include the GS1 barcode as well as other carcase information. In addition, carcases will be classified into different MSA eating quality grade groups for boning of like carcasses.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Body number	This is a number assigned to each carcase by the processor for identification purposes.	Yes	Carcase Ticket, Processing plant production management system	
From Establishment number	A number issued by Federal and State Authorities to identify the originating site from which meat or meat products were distributed to domestic or export markets. For transfer certificates, the Establishment numbers for both the dispatching and receiving establishments are recorded.	Yes	Carcase Ticket, Processing plant production management system	
Global Trade Item Number (GTIN)	Encoded in the GS1 barcode, the GTIN is a globally unique 14-digit number used to identify trade items, products, or services.	Yes	Carcase Ticket, Processing plant production management system	For more information visit the GS1 website.
MSA eating quality group/grade	This identifies carcases with similar MSA and eating quality grades, these may align with brands packed by the processor for logistic simplicity. Carcases are grouped for boning according to eating quality grades.	Yes	MSA Carcase Ticket, Processing plant production management system	For more information on MSA visit the MLA website.
Net Weight (Kilograms)	Usually encoded in the GS1 barcode, the Net Weight is a variable measure of the trade item e.g., carton, pallet or shipment recorded in kilograms.	Yes	Carcase Ticket, Processing plant production management system	For more information visit the GS1 website.
Official mark	Any stamp, seal, label, or mark that is declared by the regulations to be an official mark. An official mark signifies that the product has been inspected by and approved as safe for human consumption by an Authorised Officer.	Yes	Carcase Ticket	For more information visit the Australian Government Federal Register of Legislation.
Production Date (YYMMDD)	Encoded in the GS1 barcode, this is the 'kill' or slaughter' date of the product and is recorded in the format year, month, day (YYMMDD).	Yes	Carcase Ticket, Processing plant production	For more information visit the GS1 website.

Table 52. Information inputs, Key Data Elements and Critical Tracking Event related documentation for a beef boning room system.

			management system	
Serial Number	Encoded in the GS1 barcode, this is a code, numeric or alphanumeric, assigned to an individual instance of an item for its lifetime.	Yes	Carcase Ticket, Processing plant production management system	For more information visit the GS1 website.
Trade description	This is a collective set of words that says what the product is and may include information such as species, net weight of product, name and address of establishments, category ciphers, market endorsements, MSA eating quality etc.	Yes	Carcase Ticket, Processing plant production management system	
Lot number	A lot is a number assigned by the processor to each group of cattle consigned to slaughter and is usually vendor specific.	Yes	Carcase Ticket, Processing plant production management system	

5.2.2.4.3 Physical Outputs including Critical Tracking Events (CTEs)

The output of the Boning room is meat which can be classified, measured, and identified as red meat products for human consumption or condemned carcase parts such as trim. Product for human consumption may be packaged into cartons or onto pallets for transport.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with the outputs of the boning room system include the movement of:

- * Carton
- * Pallet
- * Condemned carcase parts

off the property, premises, or supply chain sector.

Table 53. Physical outputs and associated Critical Tracking Event related documents for a beef boning room system.

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Carton	This is a case, crate, or barrel of product.	Carton label, Official seal, Processing plant production management system	

Pallet	A logistic unit which includes a number of cartons or goods items packed together for transport or storage purposes.	SSCC/Pallet label, Processing plant production management system
Condemned carcase parts	Any tissue or structure removed from a slaughtered animal deemed unfit for human consumption. These parts may include the head, viscera, offal, musculature, and blood. NOTE: condemned offal is treated as a separate item here.	Processing plant production management system

5.2.2.4.4 Information Outputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). The information outputs associated with the movement of product out of the boning room is found on the carton and pallet labels. This information is also recorded in the processing plants production management system and includes application identifiers from the GS1 barcodes as well as other trade description information.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Carton label, Processing plant production management system, SSCC/Pallet label	
Consignment Serial Shipping Container Code (SSCC)	Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., shipment/message that is assigned by the establishment constructing the unit. The SSCC remains the same for the life of the logistic unit.	Yes	Processing plant production management system, SSCC/Pallet label	For more information visit the GS1 website.
Count of Trade Items	Usually encoded in the GS1 barcode, this is the number of trade items e.g., cartons in the logistic unit.	Yes	Processing plant production management system, SSCC/Pallet label	For more information visit the GS1 website.
From Establishment number	A number issued by Federal and State Authorities to identify the originating site from which meat or meat products were distributed to domestic or export markets.	Yes	Carton label, Processing plant production	

Table 54. Information outputs, Key Data Elements and Critical Tracking Event related documentation for a beef boning room system.

Global Trade Item Number (GTIN)	Encoded in the GS1 barcode, the GTIN is a globally unique 14-digit number used to identify trade items, products, or services.	Yes	management system, SSCC/Pallet label Carton label, Processing plant production management system, SSCC/Pallet label	For more information visit the GS1 website.
GTIN of Contained Trade Items	Encoded in the GS1 barcode, the GTIN of the contained trade items is a globally unique 14-digit number used to identify trade items, products, or services in the logistic unit.	Yes	Processing plant production management system, SSCC/Pallet label	For more information visit the GS1 website.
Net Weight (Kilograms)	Usually encoded in the GS1 barcode, the Net Weight is a variable measure of the trade item e.g., carton, pallet or shipment recorded in kilograms.	Yes	Carton label, Processing plant production management system, SSCC/Pallet label	For more information visit the GS1 website.
Official mark	Any stamp, seal, label, or mark that is declared by the regulations to be an official mark. An official mark signifies that the product has been inspected by and approved as safe for human consumption by an Authorised Officer.	Yes	Carton label, SSCC/Pallet label	
Packaging Date	Encoded in the GS1 barcode, the Packaging Date is the date on which the item was packaged and is recorded in the format year, month, day (YYMMDD).	Yes	Carton label, Processing plant production management system, SSCC/Pallet label	For more information visit the GS1 website.
Packaging Date Range	This includes the oldest and newest packaging dates for the logistic unit.	Yes	Processing plant production management system, SSCC/Pallet label	For more information visit the GS1 website.
Pallet Serial Shipping Container Code (SSCC)	Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., pallet that is assigned by the establishment constructing the unit. The	Yes	Processing plant production management system,	For more information visit the GS1 website.

	SSCC remains the same for the life of the logistic unit.		SSCC/Pallet label	-
Seal Serial Number	This is a unique serial number printed on any tamper-evident seal issued by the Department.	Yes	Official seal, Processing plant production management system	For more information visit the Australian Government Federal Register of Legislation.
Serial Number	Encoded in the GS1 barcode, this is a code, numeric or alphanumeric, assigned to an individual instance of an item for its lifetime.	Yes	Carton label, Processing plant production management system	For more information visit the GS1 website.
Shipping Mark	Also known as a port mark, this is a code comprising of three letters representing the foreign establishment number and the last nine digits of the consignment SSCC.	Yes	Processing plant production management system, SSCC/Pallet label	
Trade description	This is a collective set of words that says what the product is and may include information such as species, net weight of product, name and address of establishments, category ciphers, market endorsements, MSA eating quality etc.	Yes	Carton label, Processing plant production management system, SSCC/Pallet label	

5.2.2.4.5 Regulatory and Industry Programs

- * Meat Standards Australia (MSA)
- * AUS-MEAT
- * Australian Meat Industry Council (AMIC)
- * Department of Agriculture
- * State food authority
- * Other data sources

5.2.2.4.6 Supply Chain Node Traceability

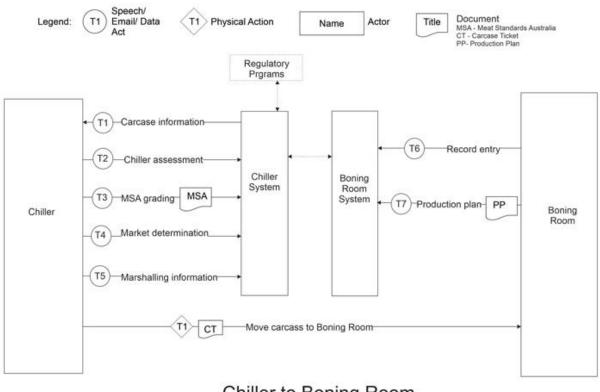
Traceability for cartoned and palletised product is limited to the carcases that have entered the boning room for the production run of cartons that are created. For example, 200 carcases (400 sides) individually identified with unique carcase tickets enter the boning room for a specific boning run. These carcase tickets are linked to the specific boning run. From these carcases, 3 200 cartons of primal cuts and 1 000 cartons of trim and other highly mixed products are created. While all cartons are identified with unique serialised carton labels, including a GS1 meat industry barcode, linked to the boning run (and may be packaged into pallets containing unique serialised pallet labels including a GS1 SSCC barcode), it is not readily possible to identify which carcases are in which cartons as the cartons will contain meat products from different carcases. If the carcases were sourced from several different properties, the resulting carton can only be traced to a number of possible carcases and source properties.

5.2.2.4.7 Data flow diagrams

Direction	Description
Input	Carcase chiller to Boning room
Output	Boning room to Cold store (Cartons)
Output	Boning room to Render

Table 55. Data flow diagrams for the inputs and outputs of a beef boning room system.

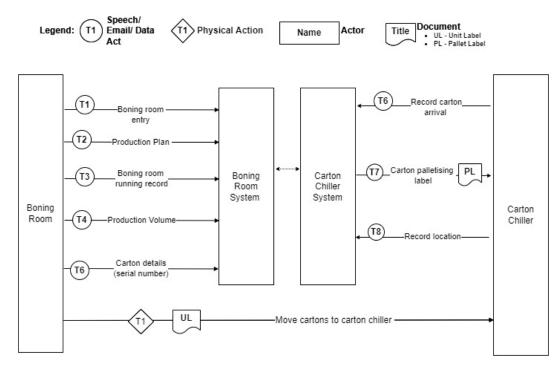
5.2.2.4.7.1 Carcase chiller to Boning room



Chiller to Boning Room

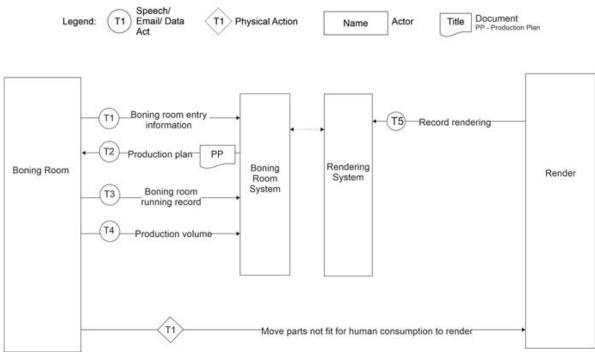
Figure 60. Data or information flows from the carcase chiller to boning room systems in the beef supply chain.

5.2.2.4.7.2 Boning room to Cold store (Cartons)



Boning Room to Carton Chiller

Figure 61. Data or information flows from the boning room to carton chiller systems in the beef supply chain.



5.2.2.4.7.3 Boning room to Render

Boning Room to Render

Figure 62. Data or information flows from the boning room to render systems in the beef supply chain.

5.2.2.5 Offal room

At slaughter, carcases are eviscerated, and the internal organs are divided into green and red offal. Green offal includes the stomach, intestines, and additional parts of the digestive tract while red offal includes the heart, kidneys, lungs, and liver. These products are first inspected by Authorised Government Officers for compliance with food safety standards and then enter the offal room where they are processed and packaged for sale. With offal likely to develop off conditions far more quickly than carcase product, it essential that offal is processed carefully, hygienically and refrigerated as quickly as possible.

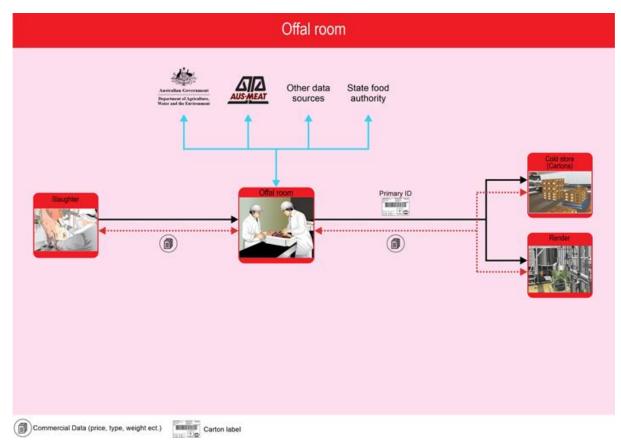


Figure 63. Inputs and outputs of the beef supply chain offal room sector.

5.2.2.5.1 Physical Inputs including Critical Tracking Events (CTEs)

The physical inputs into the offal room include the offal products e.g., heart, liver, lungs.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with inputs to the offal room system include the receival of:

* Offal.

Table 56. Physical inputs and associated Critical Tracking Event related documents for a beef offal room system.

Event	Description of the inputs	Critical Tracking Event (CTE)	More
related to		related documents (including	details
the inputs		electronic)	

Offal	The organs of the thoracic and abdominal cavities, the	Processing plant production	
	brain, the muscular tissues of the head and	management system	
	diaphragm, the tail, feet, or tendons.		

5.2.2.5.2 Information Inputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). Information inputs into the offal room are those which are found in the processors production management system and include basic product information such as establishment number and slaughter or processing date.

Table 57. Information inputs, Key Data Elements and Crit	tical Tracking Event related	documentation for a beef offal room system.
	··· · · · · · · · · · · · · · · · · ·	······································

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Batch number	This is a unique number which identifies products sharing certain production characteristics and is used for traceability purposes.	Yes	Processing plant production management system	
From Establishment number	A number issued by Federal and State Authorities to identify the originating site from which meat or meat products were distributed to domestic or export markets. For transfer certificates, the Establishment numbers for both the dispatching and receiving establishments are recorded.	Yes	Processing plant production management system	
Lot number	A lot is a number assigned by the processor to each group of cattle consigned to slaughter and is usually vendor specific.	Yes	Processing plant production management system	
Slaughter or processing date	This is the date on which livestock were slaughtered by the processor or the day on which carcases were processed (if different to slaughter date).	Yes	Processing plant production management system	

5.2.2.5.3 Physical Outputs including Critical Tracking Events (CTEs)

Physical outputs of the offal room include offal products which have been packaged into cartons or pallets for transport. Critical Tracking Event documentation accompanying these outputs include carton and pallet labels. In addition, condemned offal, product that is unsuitable for market may be sent to render. This information is all recorded in the processors production management system.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with the outputs of the offal room system include the movement of:

- * Carton
- * Pallet
- * Condemned offal

off the property, premises, or supply chain sector.

Table 58. Physical outputs and associated Critical Tracking Event related documents for a beef offal room system.

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Carton	This is a case, crate, or barrel of product.	Carton label, Official seal,	
		Processing plant production	
		management system	
Pallet	A logistic unit which includes a number of cartons	SSCC/Pallet label, Processing	
	or goods items packed together for transport or	plant production management	
	storage purposes.	system	
Condemned	Offal tissues deemed unfit for human	Processing plant production	
offal	consumption.	management system	

5.2.2.5.4 Information Outputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). Information outputs from the offal room can be found on the carton and pallet labels and is stored in the processors production management system for traceability. Such information includes application identifiers included in the GS1 barcode as well as trade description information.

Table 59. Information outputs, Key Data Elements and Critical Tracking Event related documentation for a beef offal room system.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Carton label, Processing plant production management system, SSCC/Pallet label	
Consignment Serial Shipping Container Code (SSCC)	Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., shipment/message that is assigned by the establishment constructing the unit. The SSCC remains the same for the life of the logistic unit.	Yes	Processing plant production management system, SSCC/Pallet label	For more information visit the GS1 website.

Count of Trade	Usually encoded in the GS1 barcode, this is the	Yes	Processing	
Items	number of trade items e.g., cartons in the logistic unit.	Yes	Processing plant production management system, SSCC/Pallet label	
From Establishment number	A number issued by Federal and State Authorities to identify the originating site from which meat or meat products were distributed to domestic or export markets. For transfer certificates, the Establishment numbers for both the dispatching and receiving establishments are recorded.	Yes	Carton label, Processing plant production management system, SSCC/Pallet label	
Global Trade Item Number (GTIN)	Encoded in the GS1 barcode, the GTIN is a globally unique 14-digit number used to identify trade items, products, or services.	Yes	Carton label, Processing plant production management system, SSCC/Pallet label	
GTIN of Contained Trade Items	Encoded in the GS1 barcode, the GTIN of the contained trade items is a globally unique 14- digit number used to identify trade items, products, or services in the logistic unit.	Yes	Processing plant production management system, SSCC/Pallet label	For more information visit the GS1 website.
Net Weight (Kilograms)	Usually encoded in the GS1 barcode, the Net Weight is a variable measure of the trade item e.g., carton, pallet or shipment recorded in kilograms.	Yes	Carton label, Processing plant production management system, SSCC/Pallet label	For more information visit the GS1 website.
Official mark	Any stamp, seal, label, or mark that is declared by the regulations to be an official mark. An official mark signifies that the product has been inspected by and approved as safe for human consumption by an Authorised Officer.	Yes	Carton label, SSCC/Pallet label	For more information visit the Australian Government Federal Register of Legislation.
Packaging Date	Encoded in the GS1 barcode, the Packaging Date is the date on which the item was packaged and is recorded in the format year, month, day (YYMMDD).	Yes	Carton label, Processing plant production management system, SSCC/Pallet label	For more information visit the GS1 website.

Packaging Date	This includes the oldest and newest packaging	Yes	Processing	For more
Range	dates for the logistic unit.		plant	information visit the GS1
			production	website.
			management	
			system,	
			SSCC/Pallet	
			label	
Pallet Serial Shipping	Encoded in the GS1 barcode, this is a unique	Yes	Processing	For more
Container Code	number which identifies the individual logistic		plant	information visit the GS1
(SSCC)	unit i.e., pallet that is assigned by the		production	website.
	establishment constructing the unit. The SSCC		management	
	remains the same for the life of the logistic		system,	
	unit.		SSCC/Pallet	
			label	
Seal Serial Number	This is a unique serial number printed on any	Yes	Official seal,	For more
	tamper-evident seal issued by the Department.		Processing	information visit the
			plant	Australian
			production	Government
			management	Federal Register of
			system	Legislation.
Serial Number	Encoded in the GS1 barcode, this is a code,	Yes	Carton label,	For more
	numeric or alphanumeric, assigned to an		Processing	information visit the GS1
	individual instance of an item for its lifetime.		plant	website.
			production	
			management	
			system	
Shipping Mark	Also known as a port mark, this is a code	Yes	Processing	
	comprising of three letters representing the		plant	
	foreign establishment number and the last nine		production	
	digits of the consignment SSCC.		management	
			system,	
			SSCC/Pallet	
			label	
Trade description	This is a collective set of words that says what	Yes	Carton label,	
	the product is and may include information		Processing	
	such as species, net weight of product, name		plant	
	and address of establishments, category		production	
	ciphers, market endorsements, MSA eating		management	
	quality etc.		system,	
			SSCC/Pallet	
			label	

- 5.2.2.5.5 Regulatory and Industry Programs
- * Department of Agriculture
- * AUS-MEAT
- * Australian Meat Industry Council (AMIC)
- * State food authority
- * Other data sources

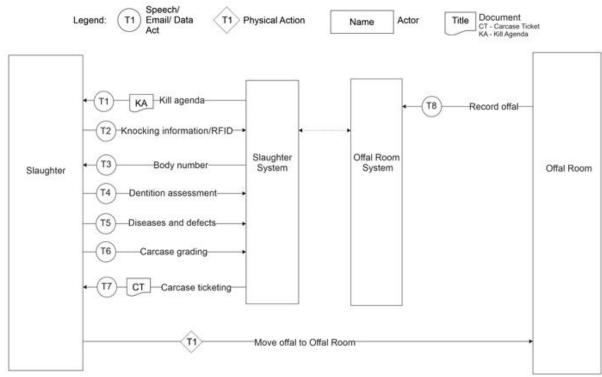
5.2.2.5.6 Supply Chain Node Traceability

Traceability for cartoned and palletised offal product is limited to the carcases which were processed for the particular offal room production run from which cartons were created. For example, 1 000 carcases (2 000 sides) are processed and individually identified with unique serialised carcase tickets, including GS1 meat industry barcodes. From these carcases, 2 000 kidneys enter the offal room for the offal room production run and are packaged into 100 x 10 kg cartons. These cartons are identified by unique serialised carton labels, including a GS1 meat industry barcode, (and may be packaged into pallets containing unique serialised pallet labels including a GS1 SSCC barcode) linked to the offal room production run. It is not readily possible to identify which carcases are in which cartons as the cartons will contain kidneys from different carcases. If the carcases were sourced from several different properties, the resulting carton can only be traced to a number of possible carcases and source properties.

5.2.2.5.7 Data flow diagrams

Table 60. Data flow diagrams for the inputs and outputs of a beef off	al room system.
Table 00. Data flow diagrams for the inputs and outputs of a beef off	ai i oonii system.

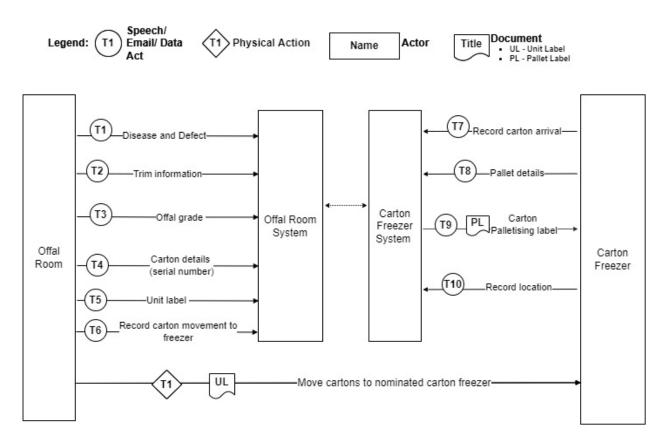
Direction	Description
Input	Slaughter floor to Offal room
Output	Offal room to Cold store (Cartons)
Output	Offal room to Render



5.2.2.5.7.1 Slaughter floor to Offal room

Slaughter to Offal Room

Figure 64. Data or information flows from the slaughter to offal room systems in the beef supply chain.

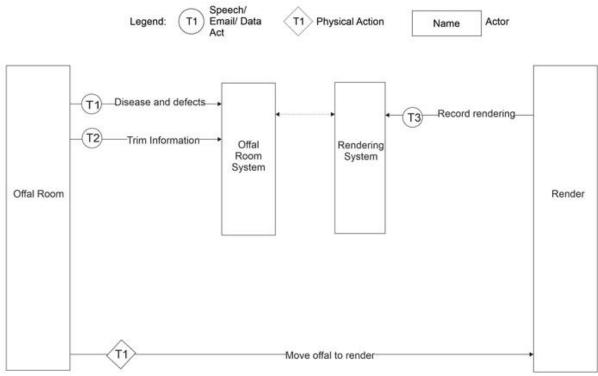


5.2.2.5.7.2 Offal room to Cold store (Cartons)

Offal Room to Carton Freezer

Figure 65. Data or information flows from the offal room to carton freezer systems in the beef supply chain.

5.2.2.5.7.3 Offal room to Render



Offal Room to Render

Figure 66. Data or information flows from the offal room to render systems in the beef supply chain.

5.2.2.6 Render

Rendering is the process of heat-treating raw materials to remove moisture and/or separate fat. Raw materials such as trim and condemned product enter the rendering plant from various processing stages such as slaughter, boning and the offal room and are converted into non-edible (for humans) by-products such as meat meal, tallow, and bone meal.

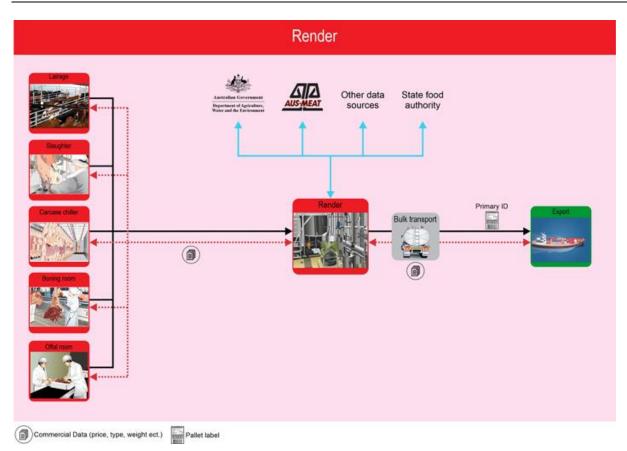


Figure 67. Inputs and outputs of the beef supply chain render sector.

5.2.2.6.1 Physical Inputs including Critical Tracking Events (CTEs)

Physical inputs to render include carcass products unsuitable or unfit for human consumption such as condemned carcases, condemned carcase parts, condemned offal and cartons from carton rework.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with inputs to the render system include the receival of:

- * Condemned carcase
- * Condemned carcase parts
- * Condemned offal
- * Carton.

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Condemned carcase	The body of a slaughtered animal deemed unfit for human consumption. This may be a condemned dressed carcase when hide, head, feet and offal are removed.	Carcase Ticket, Processing plant production	

Table 61. Physical inputs and associated Critical Tracking Event related documents for a beef render system.

		management
		system
Condemned	Any tissue or structure removed from a slaughtered animal	Processing plant
carcase parts	deemed unfit for human consumption. These parts may	production
	include the head, viscera, offal, musculature, and blood.	management
	NOTE: condemned offal is treated as a separate item here.	system
Condemned	Offal tissues deemed unfit for human consumption.	Processing plant
offal		production
		management
		system
Carton	This is a case, crate, or barrel of product.	Carton label,
		Official seal,
		Processing plant
		production
		management
		system

5.2.2.6.2 Information Inputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). Information inputs for render include those KDEs included on CTE documentation from condemned product. This may include carcase tickets or information recorded in the processing plants production management system.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Body number	This is a number assigned to each carcase by the processor for identification purposes.	Yes	Carcase Ticket, Processing plant production management system	
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Carton label, Processing plant production management system	
From Establishment number	A number issued by Federal and State Authorities to identify the originating site from which meat or meat products were distributed to domestic or export markets. For transfer certificates, the Establishment numbers for both the dispatching and receiving establishments are recorded.	Yes	Carcase Ticket, Carton label, Processing plant production management system	

Table 62. Information inputs, Key Data Elements and Critical Tracking Event related documentation for a beef render system.

Global Trade Item Number (GTIN)	Encoded in the GS1 barcode, the GTIN is a globally unique 14-digit number used to identify trade items, products, or services.	Yes	Carcase Ticket, Carton label, Processing plant production management system	For more information visit the GS1 website.
Net Weight (Kilograms)	Usually encoded in the GS1 barcode, the Net Weight is a variable measure of the trade item e.g., carton, pallet or shipment recorded in kilograms.	Yes	Carcase Ticket, Carton label, Processing plant production management system	For more information visit the GS1 website.
Official mark	Any stamp, seal, label, or mark that is declared by the regulations to be an official mark. An official mark signifies that the product has been inspected by and approved as safe for human consumption by an Authorised Officer.	Yes	Carcase Ticket, Carton label	For more information visit the Australian Government Federal Register of Legislation.
Packaging Date	Encoded in the GS1 barcode, the Packaging Date is the date on which the item was packaged and is recorded in the format year, month, day (YYMMDD).	Yes	Carton label, Processing plant production management system	For more information visit the GS1 website.
Production Date (YYMMDD)	Encoded in the GS1 barcode, this is the 'kill' or slaughter' date of the product and is recorded in the format year, month, day (YYMMDD).	Yes	Carcase Ticket, Processing plant production management system	For more information visit the GS1 website.
Seal Serial Number	This is a unique serial number printed on any tamper-evident seal issued by the Department.	Yes	Official seal, Processing plant production management system	For more information visit the Australian Government Federal Register of Legislation.
Serial Number	Encoded in the GS1 barcode, this is a code, numeric or alphanumeric, assigned to an individual instance of an item for its lifetime.	Yes	Carcase Ticket, Carton label, Processing plant production management system	For more information visit the GS1 website.
Trade description	This is a collective set of words that says what the product is and may include information such as species, net weight of product, name and address of establishments, category ciphers, market endorsements, MSA eating quality etc.	Yes	Carcase Ticket, Carton label, Processing plant production management system	

Lot number A lot is a number assigned by the processor to each group of cattle consigned to slaughter and is usually vendor specific.	Yes	Carcase Ticket, Processing plant production management system	
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5.2.2.6.3 Physical Outputs including Critical Tracking Events (CTEs)

The output of the render process is the production of by-products which can be used, stored, and sold. These byproducts may include meat meal, meat and bone meal, bone meal, blood meal and tallow. Such products exit the render process packaged in store bags or are bulk transported in container system units.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with the outputs of the render system include the movement of:

- * Rendered product store bag
- * Container System Unit

off the property, premises, or supply chain sector.

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Rendered product store bag	A large storage bag which can temporarily store large quantities of product.	SSCC/Store bag label, Animal By Product Transfer Certificate (BPTC), Processing plant production management system, Receipt of purchase/Tax Invoice, Export Permit, Export clearance documentation, Delivery Docket/Manifest, Bill of lading/Air Waybill, Certificate of Analysis (COA)	
Container System Unit	A container designed for use as a unit of cargo handling equipment in the transport of goods by aircraft or ship.	Animal By Product Transfer Certificate (BPTC), Meat Messaging Consignment Report, Processing plant production management system, Receipt of purchase/Tax Invoice, Delivery Docket/Manifest, Export Permit, Export clearance documentation, Bill of lading/Air Waybill, Certificate of Analysis (COA)	

Table 63. Physical outputs and associated Critical Tracking Event related documents for a beef render system.

5.2.2.6.4 Information Outputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). Information outputs associated with rendered product include those derived from Critical Tracking Event related documents such as the Animal By Product Transfer Certificate (BPTC), Export clearance documentation and the Delivery Docket/Manifest.

Table 64. Information outputs, Key Data Elements and Critical Tracking Event related documentation for a beef render system.

Attributes (including KDEs)	Description of the Attributes	ls a	Critical Tracking Event (CTE)	More
	(including KDEs)	KDE	related documents (including	details
			electronic)	

Bill of lading/Air	A unique document number	Yes	Bill of lading/Air Waybill,	
Waybill document	issued for traceability purposes.	res	Processing plant production	
number	issued for traceability purposes.		management system	
Company/product	This is an in-house code for the	Yes	Bill of lading/Air Waybill,	
code	identification of the product in	res	Processing plant production	
COUE	the unit.		management system, Receipt	
			of purchase/Tax Invoice,	
			SSCC/Store bag label,	
			Certificate of Analysis (COA)	
Consignment Serial	Encoded in the GS1 barcode, this	Yes	Animal By Product Transfer	For more
Shipping Container	is a unique number which	res	Certificate (BPTC), Bill of	information
Code (SSCC)	identifies the individual logistic		lading/Air Waybill, Meat	visit the GS1
Coue (33CC)	unit i.e., shipment/message that		Messaging Consignment	website.
	is assigned by the establishment			
	constructing the unit. The SSCC		Report, Processing plant production management	
	remains the same for the life of		system, SSCC/Store bag label	
	the logistic unit.		system, socc/store bag laber	
Contract number	This is a unique number	Yes	Delivery Docket/Manifest,	
contract number	allocated to the contract by the	105	Processing plant production	
	seller.		management system	
Count of Pallets	This is the number of pallets in	Yes	Meat Messaging Consignment	
	the logistic unit e.g., container		Report, Processing plant	
	system unit.		production management	
			system	
Count of Trade	Usually encoded in the GS1	Yes	Bill of lading/Air Waybill,	For more
Items	barcode, this is the number of		Delivery Docket/Manifest,	information
	trade items e.g., cartons in the		Meat Messaging Consignment	visit the GS1 website.
	logistic unit.		Report, Processing plant	website.
			production management	
			system, SSCC/Store bag label	
Date	This is the date of signing or of	Yes	Animal By Product Transfer	
	which a record entry or		Certificate (BPTC), Bill of	
	transaction was made.		lading/Air Waybill, Delivery	
			Docket/Manifest, Export	
			clearance documentation,	
			Meat Messaging Consignment	
			Report, Processing plant	
			production management	
			system, Receipt of	
			purchase/Tax Invoice,	
			Certificate of Analysis (COA)	
Delivery	This is a unique number	Yes	Delivery Docket/Manifest,	
Docket/Manifest	allocated to the docket for		Processing plant production	
number	identification purposes.		management system	
Export Health	A unique number allocated to	Yes	Meat Messaging Consignment	
Certificate Number	the health certificate issued for		Report, Processing plant	
	the export consignment for		production management	
	traceability purposes.		system	
Export Permit	A unique permit number is	Yes	Export Permit, Processing	
Number	allocated for the export		plant production management	
	consignment following	1	system	
			system	
	submission of a correct and validated Request For Permit		System	

	(RFP) which is then approved by			
	the Secretary.			
From Establishment	A number issued by Federal and	Yes	Animal By Product Transfer	
number	State Authorities to identify the		Certificate (BPTC), Delivery	
	originating site from which meat		Docket/Manifest, Export	
	or meat products were		clearance documentation,	
	distributed to domestic or export		Meat Messaging Consignment	
	markets. For transfer certificates,		Report, Processing plant	
	the Establishment numbers for		production management	
	both the dispatching and		system, SSCC/Store bag label,	
	receiving establishments are		Certificate of Analysis (COA)	
	recorded.			_
Global Trade Item	Encoded in the GS1 barcode, the	Yes	Meat Messaging Consignment	For more information
Number (GTIN)	GTIN is a globally unique 14-digit		Report, Processing plant	visit the GS1
	number used to identify trade		production management	website.
	items, products, or services.		system, SSCC/Store bag label	-
GTIN of Contained	Encoded in the GS1 barcode, the	Yes	Processing plant production	For more information
Trade Items	GTIN of the contained trade		management system,	visit the GS1
	items is a globally unique 14-		SSCC/Store bag label	website.
	digit number used to identify			
	trade items, products, or services			
Movement date	in the logistic unit. The date on which livestock or	Yes	Animal By Product Transfer	
wovement date	other products (e.g., feed or	res	Certificate (BPTC), Bill of	
	meat products) were		lading/Air Waybill, Delivery	
	transported between		Docket/Manifest, Export	
	PICs/establishments.		clearance documentation,	
			Processing plant production	
			management system,	
			Certificate of Analysis (COA)	
Net Weight	Usually encoded in the GS1	Yes	Bill of lading/Air Waybill, Meat	For more
(Kilograms)	barcode, the Net Weight is a		Messaging Consignment	information visit the GS1
	variable measure of the trade		Report, Processing plant	website.
	item e.g., carton, pallet or		production management	
	shipment recorded in kilograms.		system, SSCC/Store bag label	
Order date	This is the date on which the	Yes	Delivery Docket/Manifest,	
	purchase order or contract was		Processing plant production	
	raised by the buyer.		management system	
Packaging Date	Encoded in the GS1 barcode, the	Yes	Processing plant production	
	Packaging Date is the date on		management system,	
	which the item was packaged		SSCC/Store bag label,	
	and is recorded in the format		Certificate of Analysis (COA)	
	year, month, day (YYMMDD).			
Packaging Date	This includes the oldest and	Yes	Export clearance	
Range	newest packaging dates for the		documentation, Processing	
	logistic unit.		plant production management	
Dallat Carial Chinair -	Encoded in the CS1 have do this	Vac	system, SSCC/Store bag label	For more
Pallet Serial Shipping	Encoded in the GS1 barcode, this	Yes	Animal By Product Transfer	information
Container Code	is a unique number which identifies the individual logistic		Certificate (BPTC), Export clearance documentation,	visit the GS1
(SSCC)	unit i.e., pallet that is assigned by		Meat Messaging Consignment	website.
	the establishment constructing		Report, Processing plant	
	the unit. The SSCC remains the			
				l

	same for the life of the logistic		production management	
	unit.		system, SSCC/Store bag label	
Producer/Vendor MSA Registration Number	Producers consigning cattle to MSA markets are required to be registered and have a unique MSA Registration Number.	Yes	Processing plant production management system	For more information on MSA visit the MLA website.
Production Date (YYMMDD)	Encoded in the GS1 barcode, this is the 'kill' or slaughter' date of the product and is recorded in the format year, month, day (YYMMDD).	Yes	Animal By Product Transfer Certificate (BPTC)	For more information visit the GS1 website.
Recipient Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Processing plant production management system, Receipt of purchase/Tax Invoice	
Seal Serial Number	This is a unique serial number printed on any tamper-evident seal issued by the Department.	Yes	Animal By Product Transfer Certificate (BPTC), Bill of lading/Air Waybill, Export clearance documentation, Processing plant production management system	For more information visit the GS1 website.
Seller/Supplier Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Processing plant production management system, Receipt of purchase/Tax Invoice	
Shipping Mark	Also known as a port mark, this is a code comprising of three letters representing the foreign establishment number and the last nine digits of the consignment SSCC.	Yes	Bill of lading/Air Waybill, Delivery Docket/Manifest, Meat Messaging Consignment Report, Processing plant production management system, SSCC/Store bag label, Certificate of Analysis (COA)	
To Establishment number	A number issued by Federal and State Authorities to identify the originating site from which meat or meat products were distributed to domestic or export markets. For transfer certificates, the Establishment numbers for both the dispatching and receiving establishments are recorded.	Yes	Animal By Product Transfer Certificate (BPTC), Export clearance documentation, Processing plant production management system	
Trade description	This is a collective set of words that says what the product is and may include information such as species, net weight of product, name and address of establishments, category ciphers, market endorsements, MSA eating quality etc.	Yes	Animal By Product Transfer Certificate (BPTC), Delivery Docket/Manifest, Export clearance documentation, Meat Messaging Consignment Report, Processing plant production management system, SSCC/Store bag label	
Transfer Certificate number	A unique certificate number issued for traceability purposes.	Yes	Animal By Product Transfer Certificate (BPTC), Meat Messaging Consignment	

			Report, Processing plant production management system	
Transport registration number	The registration number of the vehicle in which the animals or product were transported. For shipments of product this will be a shipping container number.	Yes	Animal By Product Transfer Certificate (BPTC), Bill of lading/Air Waybill, Delivery Docket/Manifest, Export clearance documentation, Meat Messaging Consignment Report, Processing plant production management system	
Analysis Date	This is the date on which a product sample was analysed.	Yes	Certificate of Analysis (COA), Processing plant production management system	
Certificate of Analysis number	A unique certificate number issued for traceability purposes.	Yes	Certificate of Analysis (COA), Processing plant production management system	

5.2.2.6.5 Regulatory and Industry Programs

- * Department of Agriculture
- * AUS-MEAT
- * Australian Renderers Association (ARA)
- * Other data sources
- * State food authority

5.2.2.6.6 Supply Chain Node Traceability

The traceability of rendered and hide product back to the live animal and property of origin is operationally impractical. This is because rendered and hide products are bulk processed and packaged from any given processing day or number of processing days. While this means that the production date or kill date of animals from which hides or rendered product is likely to be known, any batch of product being packaged into store bags or pallets with unique serialised labels is only traceable to any number of cattle or source properties.

For example, hides or product for render which make up one batch come from a total of 6 plant kill day combinations. For each processing day 800 animals, sourced from 8 different properties are slaughtered and the unique serialised NLIS ID tag numbers known for each animal as well as that of the corresponding carcase ticket. With render or hide products from these processing days being processed and packaged in one batch, the unique serialised identifiers of output products can be linked only to that batch and the processing dates from which product was obtained. This means that one batch is comprised of any of 4 800 source animals that were supplied by any of 48 source properties.

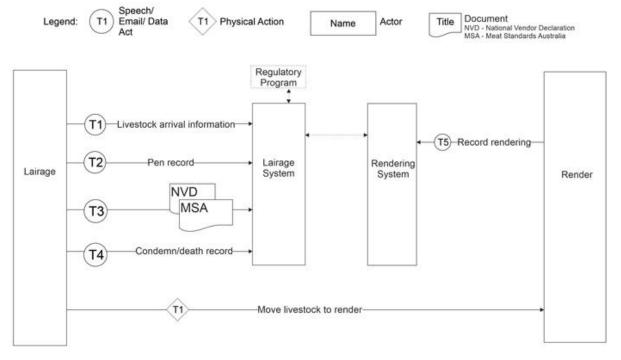
5.2.2.6.7 Data flow diagrams

Table 65. Data flow diagrams for the inputs and outputs of a beef render system.

Direction	Description
Input	Lairage to Render - condemns and dead on arrival/ in pen

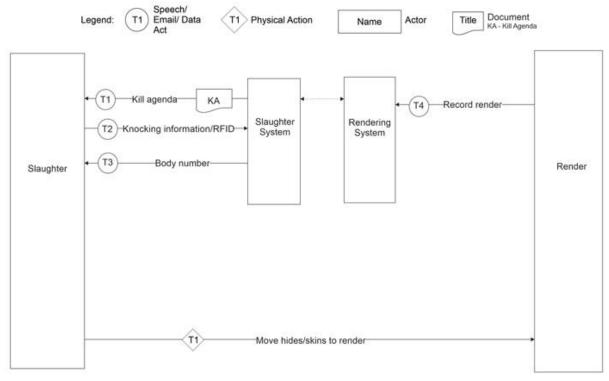
Input	Slaughter floor to Render - hides/skins	
Input	Slaughter floor to Render - not fit for human consumption (red bin)	
Input	Offal room to Render	
Input	Boning room to Render	
Input	Carton rework to Render	
Input	Carcase chiller to Render	
Output	Render (meat/ bone meal) to Render loadout	
Output	Render (tallow) to Render loadout	

5.2.2.6.7.1 Lairage to Render - condemns and dead on arrival/ in pen



Lairage to Render - Condemns and Dead on arrival/ in pen

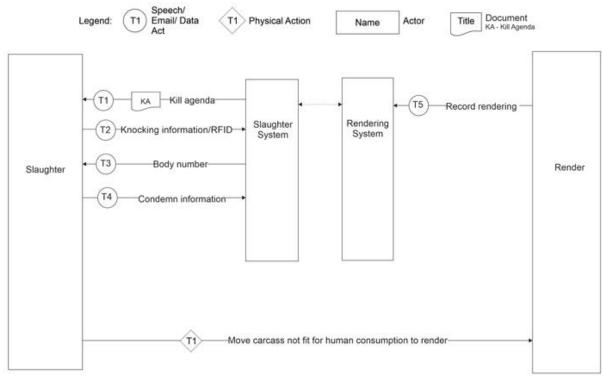
Figure 68. Data or information flows from the lairage to render (condemns and dead on arrival) systems in the beef supply chain.



5.2.2.6.7.2 Slaughter floor to Render - hides/skins

Slaughter to Render -Hides/Skins

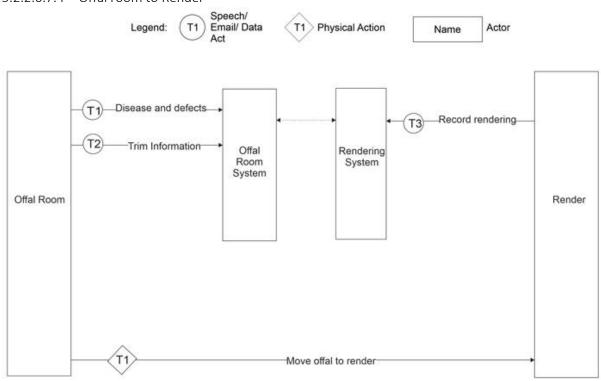
Figure 69. Data or information flows from the slaughter to render (hides/skins) systems in the beef supply chain.



5.2.2.6.7.3 Slaughter floor to Render - not fit for human consumption (red bin)

Slaughter to Render-Not Fit for Human Consumption

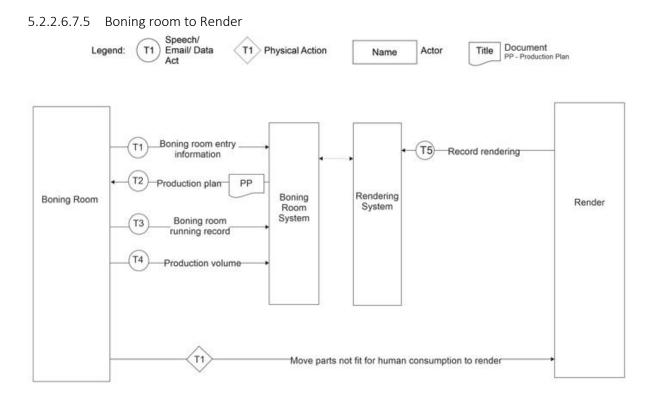
Figure 70. Data or information flows from the slaughter to render (not fit for human consumption) systems in the beef supply chain.



5.2.2.6.7.4 Offal room to Render

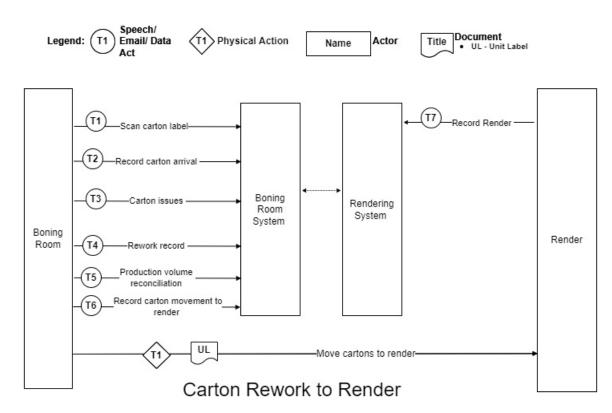
Offal Room to Render

Figure 71. Data or information flows from the offal room to render systems in the beef supply chain.



Boning Room to Render

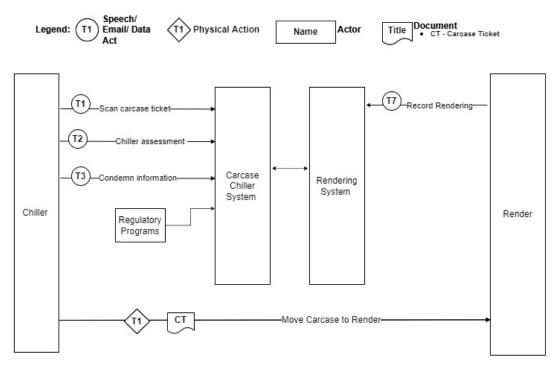
Figure 72. Data or information flows from the boning room to render systems in the beef supply chain.



5.2.2.6.7.6 Carton rework to Render

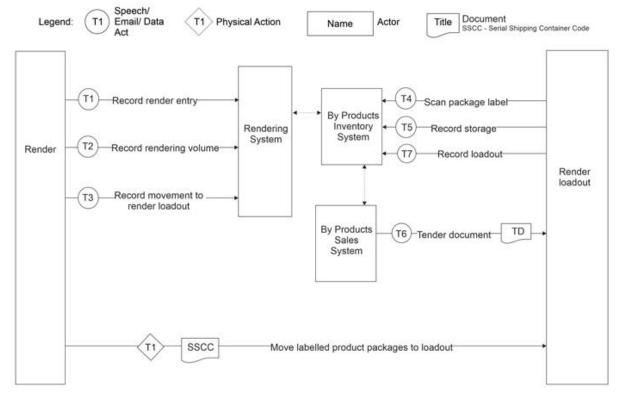
Figure 73. Data or information flows from the carton rework to render systems in the beef supply chain.

5.2.2.6.7.7 Carcase chiller to Render



Carcase Chiller to Render

Figure 74. Data or information flows from the carcase chiller to render systems in the beef supply chain.

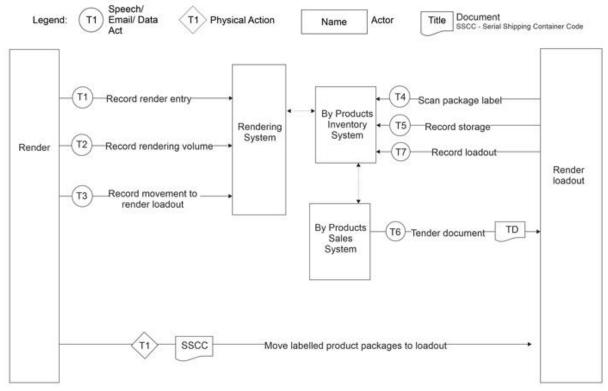


5.2.2.6.7.8 Render (meat/ bone meal) to Render loadout

Render (meat/bone meal) to Render Loadout

Figure 75. Data or information flows from the render (meat/bone meal) to render (loadout) systems in the beef supply chain.





Render (tallow) to Render Loadout

Figure 76. Data or information flows from the render (tallow) to render (loadout) systems in the beef supply chain.

5.2.2.7 Hides

Hide and skin processing is the location at the processing plant whereby hides and skins are prepared for export. This involves the trimming of raw materials to exclude internal organs, bone, and hoof as well as the preservation and treatment for insects and bacteria where required. Hides and skins are then packed to ensure the hygienic transportation of product to export markets.

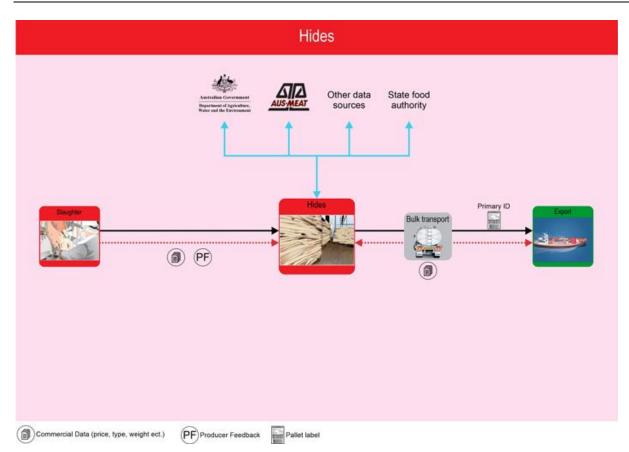


Figure 77. Inputs and outputs of the beef supply chain hides sector.

5.2.2.7.1 Physical Inputs including Critical Tracking Events (CTEs)

Once the hide is removed, it goes through various stages of processing before it is sold. Therefore, the inputs into the hide production system include the hide/skin, derived from slaughtered livestock, as well as hide/skin additives. Such additives are used for the treatment of hides before sale and may include products such as salt.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with inputs to the hide system include the receival of:

- * Hide/Skin
- * Hide/Skin additives.

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Hide/Skin	The pelt of the animal. Typically referred to as 'hide' for larger animals e.g., cattle and 'skin' for smaller animals e.g., sheep, calves.	Processing plant production management system	

Table 66. Physical inputs and associated Critical Tracking Event related documents for a beef hides system.

Hide/Skin additives	Materials used in treatment of hides/skins for preservation purposes e.g., salt.	Processing plant production management system, Receipt of purchase/Tax Invoice	
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5.2.2.7.2 Information Inputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). Information inputs into the hide/skin production system are those which are found in the processors production management system and include basic product information such as establishment number and production date.

Table 67. Information inputs, Key Data Elements and Critical Tracking Event related documentation for a beef hides system.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Batch number	This is a unique number which identifies products sharing certain production characteristics and is used for traceability purposes.	Yes	Processing plant production management system	
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Processing plant production management system, Receipt of purchase/Tax Invoice	
Date	This is the date of signing or of which a record entry or transaction was made.	Yes	Processing plant production management system, Receipt of purchase/Tax Invoice	
From Establishment number	A number issued by Federal and State Authorities to identify the originating site from which meat or meat products were distributed to domestic or export markets. For transfer certificates, the Establishment	Yes	Processing plant production management system	

	numbers for both the dispatching and receiving establishments are recorded.			
Production Date (YYMMDD)	Encoded in the GS1 barcode, this is the 'kill' or slaughter' date of the product and is recorded in the format year, month, day (YYMMDD).	Yes	Processing plant production management system	For more information visit the GS1 website.
Recipient Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Processing plant production management system, Receipt of purchase/Tax Invoice	For more information visit the ATO website.
Seller/Supplier Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Processing plant production management system, Receipt of purchase/Tax Invoice	For more information visit the ATO website.
Treatment date	The date on which a treatment or product was applied to a unit e.g., paddock, animal, fodder etc.	Yes	Processing plant production management system	

5.2.2.7.3 Physical Outputs including Critical Tracking Events (CTEs)

Physical outputs of the hide/skin production system are treated hides which are loaded onto pallets or into container system units for transport and sale.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with the outputs of the hides system include the movement of:

* Pallet

* Container System Unit

off the property, premises, or supply chain sector.

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Pallet	A logistic unit which includes a number of cartons or goods items packed together for transport or storage purposes.	Animal By Product Transfer Certificate (BPTC), Delivery Docket/Manifest, Export clearance documentation, Export Permit, Processing plant production management system, Receipt of purchase/Tax Invoice, SSCC/Pallet label, Bill of lading/Air Waybill, Certificate of Analysis (COA)	
Container System Unit	A container designed for use as a unit of cargo handling equipment in the transport of goods by aircraft or ship.	Animal By Product Transfer Certificate (BPTC), Delivery Docket/Manifest, Export clearance documentation, Export Permit, Meat Messaging Consignment Report, Processing plant production management system, Receipt of purchase/Tax Invoice, Bill of lading/Air Waybill, Certificate of Analysis (COA)	

Table 68. Physical outputs and associated Critical Tracking Event related documents for a beef hides system.

5.2.2.7.4 Information Outputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). Information outputs from the hide/skin production system can be found on the pallet label and on container system unit documentation, as well as other sale/transport documentation. This information is stored in the processors production management system for traceability. Such information includes application identifiers included in the GS1 barcode as well as trade description information.

Table 69. Information outputs, Key Data Elements and Critical Tracking Event related documentation for a beef hides system.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Bill of lading/Air Waybill document number	A unique document number issued for traceability purposes.	Yes	Bill of lading/Air Waybill, Processing plant production management system	
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Bill of lading/Air Waybill, Processing plant production management system, Receipt of purchase/Tax Invoice, SSCC/Pallet label, Certificate of Analysis (COA)	
Consignment Serial Shipping Container Code (SSCC)	Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., shipment/message that is assigned by the establishment constructing the	Yes	Animal By Product Transfer Certificate (BPTC), Bill of lading/Air Waybill, Export clearance documentation, Meat Messaging Consignment Report,	For more information visit the GS1 website.

	unit. The SSCC remains the same for the life of the logistic unit.		Processing plant production management system, SSCC/Pallet label	
Contract number	This is a unique number allocated to the contract by the seller.	Yes	Delivery Docket/Manifest, Processing plant production management system	
Count of Pallets	This is the number of pallets in the logistic unit e.g., container system unit.	Yes	Meat Messaging Consignment Report	
Count of Trade Items	Usually encoded in the GS1 barcode, this is the number of trade items e.g., cartons in the logistic unit.	Yes	Bill of lading/Air Waybill, Delivery Docket/Manifest, Meat Messaging Consignment Report, Processing plant production management system, SSCC/Pallet label	
Date	This is the date of signing or of which a record entry or transaction was made.	Yes	Animal By Product Transfer Certificate (BPTC), Bill of lading/Air Waybill, Delivery Docket/Manifest, Export clearance documentation, Meat Messaging Consignment Report, Processing plant production management system, Receipt of purchase/Tax Invoice, Certificate of Analysis (COA)	
Delivery Docket/Manifest number	This is a unique number allocated to the docket for identification purposes.	Yes	Delivery Docket/Manifest, Processing plant production management system	
Export Health Certificate Number	A unique number allocated to the health certificate issued for the export consignment for traceability purposes.	Yes	Meat Messaging Consignment Report, Processing plant production management system	For more information visit the Department of Agriculture, Water and the Environment website.
Export Permit Number	A unique permit number is allocated for the export consignment following submission of a correct and validated Request For Permit (RFP) which is then approved by the Secretary.	Yes	Export Permit, Processing plant production management system	For more information visit the Department of Agriculture, Water and the

				Environment website.
From Establishment number	A number issued by Federal and State Authorities to identify the originating site from which meat or meat products were distributed to domestic or export markets. For transfer certificates, the Establishment numbers for both the dispatching and receiving establishments are recorded.	Yes	Animal By Product Transfer Certificate (BPTC), Delivery Docket/Manifest, Export clearance documentation, Meat Messaging Consignment Report, Processing plant production management system, SSCC/Pallet label, Certificate of Analysis (COA)	
Global Trade Item Number (GTIN)	Encoded in the GS1 barcode, the GTIN is a globally unique 14-digit number used to identify trade items, products, or services.	Yes	Meat Messaging Consignment Report, Processing plant production management system, SSCC/Pallet label	For more information visit the GS1 website.
GTIN of Contained Trade Items	Encoded in the GS1 barcode, the GTIN of the contained trade items is a globally unique 14-digit number used to identify trade items, products, or services in the logistic unit.	Yes	Processing plant production management system, SSCC/Pallet label	For more information visit the GS1 website.
Movement date	The date on which livestock or other products (e.g., feed or meat products) were transported between PICs/establishments.	Yes	Animal By Product Transfer Certificate (BPTC), Bill of lading/Air Waybill, Delivery Docket/Manifest, Export clearance documentation, Processing plant production management system, Certificate of Analysis (COA)	
Net Weight (Kilograms)	Usually encoded in the GS1 barcode, the Net Weight is a variable measure of the trade item e.g., carton, pallet or shipment recorded in kilograms.	Yes	Bill of lading/Air Waybill, Meat Messaging Consignment Report, Processing plant production management system, SSCC/Pallet label	For more information visit the GS1 website.
Official mark	Any stamp, seal, label, or mark that is declared by the regulations to be an official mark. An official mark signifies that the product has been inspected by and approved as	Yes	SSCC/Pallet label	For more information visit the Australian Government Federal

Order date	safe for human consumption by an Authorised Officer. This is the date on which the purchase order or contract was raised by the buyer.	Yes	Delivery Docket/Manifest, Processing plant production management system	Register of Legislation.
Packaging Date	Encoded in the GS1 barcode, the Packaging Date is the date on which the item was packaged and is recorded in the format year, month, day (YYMMDD).	Yes	Processing plant production management system, SSCC/Pallet label, Certificate of Analysis (COA)	For more information visit the GS1 website.
Packaging Date Range	This includes the oldest and newest packaging dates for the logistic unit.	Yes	Export clearance documentation, Processing plant production management system, SSCC/Pallet label	
Pallet Serial Shipping Container Code (SSCC)	Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., pallet that is assigned by the establishment constructing the unit. The SSCC remains the same for the life of the logistic unit.	Yes	Animal By Product Transfer Certificate (BPTC), Export clearance documentation, Meat Messaging Consignment Report, Processing plant production management system, SSCC/Pallet label	For more information visit the GS1 website.
Production Date (YYMMDD)	Encoded in the GS1 barcode, this is the 'kill' or slaughter' date of the product and is recorded in the format year, month, day (YYMMDD).	Yes	Animal By Product Transfer Certificate (BPTC), Processing plant production management system	For more information visit the GS1 website.
Recipient Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Processing plant production management system, Receipt of purchase/Tax Invoice	For more information visit the ATO website.
Seller/Supplier Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Processing plant production management system, Receipt of purchase/Tax Invoice	For more information visit the ATO website.
Seal Serial Number	This is a unique serial number printed on any tamper-evident seal issued by the Department.	Yes	Animal By Product Transfer Certificate (BPTC), Bill of lading/Air Waybill, Export clearance documentation, Processing plant production management system	For more information visit the Australian Government Federal

				Register of Legislation.
Shipping Mark	Also known as a port mark, this is a code comprising of three letters representing the foreign establishment number and the last nine digits of the consignment SSCC.	Yes	Bill of lading/Air Waybill, Delivery Docket/Manifest, Meat Messaging Consignment Report, Processing plant production management system, SSCC/Pallet label, Certificate of Analysis (COA)	
To Establishment number	A number issued by Federal and State Authorities to identify the originating site from which meat or meat products were distributed to domestic or export markets. For transfer certificates, the Establishment numbers for both the dispatching and receiving establishments are recorded.	Yes	Animal By Product Transfer Certificate (BPTC), Export clearance documentation, Processing plant production management system	
Trade description	This is a collective set of words that says what the product is and may include information such as species, net weight of product, name and address of establishments, category ciphers, market endorsements, MSA eating quality etc.	Yes	Animal By Product Transfer Certificate (BPTC), Delivery Docket/Manifest, Export clearance documentation, Meat Messaging Consignment Report, Processing plant production management system, SSCC/Pallet label	
Transfer Certificate number	A unique certificate number issued for traceability purposes.	Yes	Animal By Product Transfer Certificate (BPTC), Meat Messaging Consignment Report, Processing plant production management system	For more information visit the Department of Agriculture, Water and the Environment website.
Transport registration number	The registration number of the vehicle in which the animals or product were transported. For shipments of product this will be a shipping container number.	Yes	Animal By Product Transfer Certificate (BPTC), Bill of lading/Air Waybill, Delivery Docket/Manifest, Export clearance documentation, Meat Messaging Consignment Report, Processing plant production management system	

Analysis Date	This is the date on which a product sample was analysed.	Yes	Certificate of Analysis (COA), Processing plant production management system	
Certificate of Analysis number	A unique certificate number issued for traceability purposes.	Yes	Certificate of Analysis (COA), Processing plant production management system	

- 5.2.2.7.5 Regulatory and Industry Programs
- * Department of Agriculture
- * AUS-MEAT
- * Australian Hides Skin and Leather Exporters Association (AHSLEA)
- * Other data sources
- * State food authority

5.2.2.7.6 Supply Chain Node Traceability

The traceability of rendered and hide product back to the live animal and property of origin is operationally impractical. This is because rendered and hide products are bulk processed and packaged from any given processing day or number of processing days. While this means that the production date or kill date of animals from which hides or rendered product is likely to be known, any batch of product being packaged into store bags or pallets with unique serialised labels is only traceable to any number of cattle or source properties.

For example, hides or product for render which make up one batch come from a total of 6 plant kill day combinations. For each processing day 800 animals, sourced from 8 different properties are slaughtered and the unique serialised NLIS ID tag numbers known for each animal as well as that of the corresponding carcase ticket. With render or hide products from these processing days being processed and packaged in one batch, the unique serialised identifiers of output products can be linked only to that batch and the processing dates from which product was obtained. This means that one batch is comprised of any of 4 800 source animals that were supplied by any of 48 source properties.

5.2.2.7.7 Data flow diagrams

Direction	Description
Input	Slaughter floor to Hides
Output	Hides to Bulk loadout

Table 70. Data flow diagrams for the inputs and outputs of a beef hides system.

5.2.2.8 Cold store (carcase)

Storing chilled carcases or carcase products (e.g., cartons) typically provides a stock buffer between production and dispatch of product intended for domestic or export markets. A cold storage system involves refrigerated chambers that can chill or freeze any perishable product for a period of time before dispatch. During this process, the ageing of meat also occurs, progressively increasing tenderness and flavour. Storage rooms must take into account the storage requirements for different products, as well as rules for loading maintenance and hygiene of storage equipment. Carcases, identified by unique GS1 barcoded carcase tickets, are stored, unloaded, and loaded on rails and may lose weight via evaporation. Therefore, short storage times for carcases is very important.

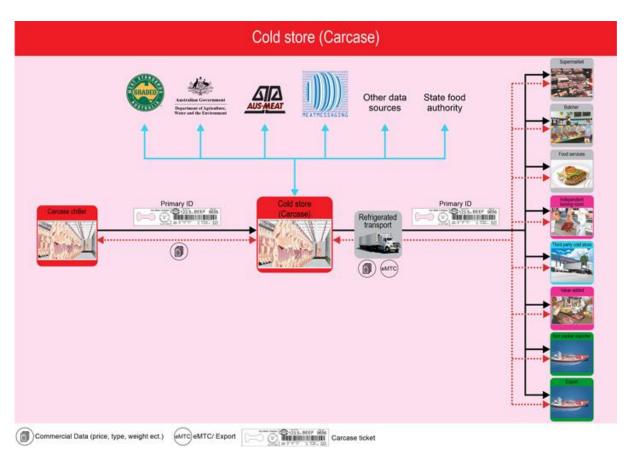


Figure 78. Inputs and outputs of the beef supply chain cold store (carcase) sector.

5.2.2.8.1 Physical Inputs including Critical Tracking Events (CTEs)

The physical inputs into the cold storage unit include dressed carcasses which have been passed as safe for human consumption by an Authorised Officer. Critical Tracking Event related documents accompanying these carcases may include the carcass ticket and MSA carcase ticket. This information is recorded in the processing plants production management system.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with inputs to the carcase cold store system include the receival of: * Carcase.

Table 71. Physical inputs and associated Critical Tracking Event related documents for a beef cold store (carcase) system.

Event	Description of the inputs	Critical Tracking Event (CTE)	More
related to		related documents (including	details
the inputs		electronic)	

Carcase	The body of a slaughtered animal after bleeding.	Carcase Ticket, MSA Carcase Ticket,
	Becomes a dressed carcase when hide, head, feet	Processing plant production
	and offal are removed.	management system

5.2.2.8.2 Information Inputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). There are a number of information inputs associated with the movement of carcases into the cold storage system. These are largely included on the carcase ticket and are Key Data Elements encapsulated by the GS1 barcode, as well as other information required by federal legislation.

Table 72. Information inputs, Key Data Elements and Critical Tracking Event related documentation for a beef cold store (carcase) system.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Body number	This is a number assigned to each carcase by the processor for identification purposes.	Yes	Carcase Ticket, Processing plant production management system	
From Establishment number	A number issued by Federal and State Authorities to identify the originating site from which meat or meat products were distributed to domestic or export markets. For transfer certificates, the Establishment numbers for both the dispatching and receiving establishments are recorded.	Yes	Carcase Ticket, Processing plant production management system	
Global Trade Item Number (GTIN)	Encoded in the GS1 barcode, the GTIN is a globally unique 14-digit number used to identify trade items, products, or services.	Yes	Carcase Ticket, Processing plant production management system	For more information visit the GS1 website.
MSA eating quality group/grade	This identifies carcases with similar MSA and eating quality grades, these may align with brands packed by the processor for logistic simplicity. Carcases are grouped for boning according to eating quality grades.	Yes	MSA Carcase Ticket, Processing plant production management system	For more information on MSA visit the MLA website.
Net Weight (Kilograms)	Usually encoded in the GS1 barcode, the Net Weight is a variable measure of the trade item e.g., carton, pallet or shipment recorded in kilograms.	Yes	Carcase Ticket, Processing plant production management system	For more information visit the GS1 website.

Official mark	Any stamp, seal, label, or mark that is declared by the regulations to be an official mark. An official mark signifies that the product has been inspected by and approved as safe for human consumption by an Authorised Officer.	Yes	Carcase Ticket	For more information visit the Australian Government Federal Register of Legislation.
Production Date (YYMMDD)	Encoded in the GS1 barcode, this is the 'kill' or slaughter' date of the product and is recorded in the format year, month, day (YYMMDD).	Yes	Carcase Ticket, Processing plant production management system	For more information visit the GS1 website.
Serial Number	Encoded in the GS1 barcode, this is a code, numeric or alphanumeric, assigned to an individual instance of an item for its lifetime.	Yes	Carcase Ticket, Processing plant production management system	For more information visit the GS1 website.
Trade description	This is a collective set of words that says what the product is and may include information such as species, net weight of product, name and address of establishments, category ciphers, market endorsements, MSA eating quality etc.	Yes	Carcase Ticket, Processing plant production management system	
Lot number	A lot is a number assigned by the processor to each group of cattle consigned to slaughter and is usually vendor specific.	Yes	Carcase Ticket, Processing plant production management system	

5.2.2.8.3 Physical Outputs including Critical Tracking Events (CTEs)

The physical outputs of the carcase chiller system include carcases passed as safe for human consumption; these may be loaded into container system units for transport. Documents accompanying the movement of carcases out of the cold storage system include those such as the delivery docket/manifest, Meat Transfer Certificate (MTC).

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with the outputs of the carcase cold store system include the movement of:

- * Carcase
- * Container System Unit

off the property, premises, or supply chain sector.

Table 73. Physical outputs and associated Critical Tracking Event related documents for a beef cold store (carcase) system.

Event	Description of the	Critical Tracking Event (CTE) related documents (including	More
related to	inputs	electronic)	details
the inputs			

Carcase	The body of a slaughtered animal after bleeding. Becomes a dressed carcase when hide, head, feet and offal are removed.	Carcase Ticket, Delivery Docket/Manifest, Meat Transfer Certificate (MTC), MSA Carcase Ticket, Processing plant production management system, Receipt of purchase/Tax Invoice	
Container System Unit	A container designed for use as a unit of cargo handling equipment in the transport of goods by aircraft or ship.	Delivery Docket/Manifest, Export Health Certificate, Export Permit, Meat Messaging Consignment Report, Meat Transfer Certificate (MTC), Official seal, Processing plant production management system, Receipt of purchase/Tax Invoice, Bill of lading/Air Waybill, Certificate of Analysis (COA)	

5.2.2.8.4 Information Outputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). The information outputs relating to the movement of carcases out of the cold storage system are derived from CTE documentation ranging from Receipt of purchase/Tax Invoices to the Bill of lading/Air Waybill and Meat Messaging Consignment Reports. This information will be stored in the processing plants production management system.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents	More details
			(including electronic)	
Bill of lading/Air	A unique document number	Yes	Bill of lading/Air Waybill,	
Waybill document	issued for traceability purposes.		Processing plant production	
number			management system,	
			Certificate of Analysis	
			(COA)	
Body number	This is a number assigned to each	Yes	Carcase Ticket, Processing	
	carcase by the processor for		plant production	
	identification purposes.		management system	
Company/product	This is an in-house code for the	Yes	Bill of lading/Air Waybill,	
code	identification of the product in the		Processing plant production	
	unit.		management system,	
			Receipt of purchase/Tax	
			Invoice, Certificate of	
Consignment Conicl	Freeded in the CC1 horseds, this	Vac	Analysis (COA)	
Consignment Serial	Encoded in the GS1 barcode, this	Yes	Bill of lading/Air Waybill,	
Shipping Container Code (SSCC)	is a unique number which identifies the individual logistic		Meat Messaging Consignment Report, Meat	
COUP (SSCC)	unit i.e., shipment/message that is		Transfer Certificate (MTC),	
	assigned by the establishment		Processing plant production	
	constructing the unit. The SSCC		management system	
	remains the same for the life of		management system	
	the logistic unit.			
Contract number	This is a unique number allocated	Yes	Delivery Docket/Manifest,	
	to the contract by the seller.		Processing plant production	
			management system	

Table 74. Information outputs, Key Data Elements and Critical Tracking Event related documentation for a beef cold store (carcase) system.

	The state of the s	N		
Count of Pallets	This is the number of pallets in the	Yes	Meat Messaging	
	logistic unit e.g., container system		Consignment Report,	
	unit.		Processing plant production	
			management system	_
Count of Trade	Usually encoded in the GS1	Yes	Bill of lading/Air Waybill,	For more information
Items	barcode, this is the number of		Delivery Docket/Manifest,	visit the GS1
	trade items e.g., cartons in the		Meat Messaging	website.
	logistic unit.		Consignment Report,	
			Processing plant production	
			management system	
Date	This is the date of signing or of	Yes	Bill of lading/Air Waybill,	
	which a record entry or		Delivery Docket/Manifest,	
	transaction was made.		Meat Messaging	
			Consignment Report, Meat	
			Transfer Certificate (MTC),	
			Processing plant production	
			management system,	
			Receipt of purchase/Tax	
			Invoice, Certificate of	
			Analysis (COA)	
Delivery	This is a unique number allocated	Yes	Delivery Docket/Manifest,	
, Docket/Manifest	to the docket for identification		Processing plant production	
number	purposes.		management system	
Export Health	A unique number allocated to the	Yes	Export Health Certificate,	For more
Certificate Number	health certificate issued for the		Meat Messaging	information
	export consignment for		Consignment Report,	visit the Department of
	traceability purposes.		Processing plant production	Agriculture,
			management system	Water and the
				Environment website.
Export Permit	A unique permit number is	Yes	Export Permit, Processing	For more
Number	allocated for the export	105	plant production	information
Number	consignment following submission		management system	visit the
	of a correct and validated Request		mundgement system	Department of Agriculture,
	For Permit (RFP) which is then			Water and the
	approved by the Secretary.			Environment
From Fotoblishers and		Vac	Carpage Ticket Delivery	website.
From Establishment	A number issued by Federal and	Yes	Carcase Ticket, Delivery	
number	State Authorities to identify the		Docket/Manifest, Export	
	originating site from which meat		Health Certificate, Meat	
	or meat products were distributed		Messaging Consignment	
	to domestic or export markets. For		Report, Meat Transfer	
	transfer certificates, the		Certificate (MTC),	
	Establishment numbers for both		Processing plant production	
	the dispatching and receiving		management system,	
	establishments are recorded.		Certificate of Analysis	
			(COA)	
Global Trade Item	Encoded in the GS1 barcode, the	Yes	Carcase Ticket, Meat	For more information
Number (GTIN)	GTIN is a globally unique 14-digit		Messaging Consignment	visit the GS1
	number used to identify trade		Report, Processing plant	website.
	items, products, or services.		production management	
			system	
Movement date	The date on which livestock or	Yes	Bill of lading/Air Waybill,	
		1	Dolivory Docket /Manifast	1
	other products (e.g., feed or meat		Delivery Docket/Manifest, Export Health Certificate,	

	products) were transported between PICs/establishments.		Meat Transfer Certificate (MTC), Processing plant production management	
			system, Certificate of Analysis (COA)	_
MSA eating quality group/grade	This identifies carcases with similar MSA and eating quality grades, these may align with brands packed by the processor for logistic simplicity. Carcases are grouped for boning according to eating quality grades.	Yes	MSA Carcase Ticket, Processing plant production management system	For more information on MSA visit the MLA website.
MSA Licence Number	Any establishment consigning, supplying, or identifying MSA Certified Product must be registered and have a unique MSA Licence Number.	Yes	Processing plant production management system, Receipt of purchase/Tax Invoice	For more information on MSA visit the MLA website.
Net Weight (Kilograms)	Usually encoded in the GS1 barcode, the Net Weight is a variable measure of the trade item e.g., carton, pallet or shipment recorded in kilograms.	Yes	Bill of lading/Air Waybill, Carcase Ticket, Export Health Certificate, Meat Messaging Consignment Report, Processing plant production management system	For more information visit the GS1 website.
Official mark	Any stamp, seal, label, or mark that is declared by the regulations to be an official mark. An official mark signifies that the product has been inspected by and approved as safe for human consumption by an Authorised Officer.	Yes	Carcase Ticket	For more information visit the Australian Government Federal Register of Legislation.
Order date	This is the date on which the purchase order or contract was raised by the buyer.	Yes	Delivery Docket/Manifest, Processing plant production management system	
Pallet Serial Shipping Container Code (SSCC)	Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., pallet that is assigned by the establishment constructing the unit. The SSCC remains the same for the life of the logistic unit.	Yes	Meat Messaging Consignment Report, Meat Transfer Certificate (MTC), Processing plant production management system	For more information visit the GS1 website.
Production Date (YYMMDD)	Encoded in the GS1 barcode, this is the 'kill' or slaughter' date of the product and is recorded in the format year, month, day (YYMMDD).	Yes	Carcase Ticket, Meat Transfer Certificate (MTC), Processing plant production management system, Certificate of Analysis (COA)	For more information visit the GS1 website.
Recipient Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Processing plant production management system, Receipt of purchase/Tax Invoice	For more information visit the ATO website.

		Mar		Formoro
Seller/Supplier	This is an 11-digit registration	Yes	Processing plant production	For more information
Australian Business	number, issued by the Australian		management system,	visit the ATO
Number (ABN)	Tax Office, used to identify		Receipt of purchase/Tax	website.
	businesses.		Invoice	For more
Seal Serial Number	This is a unique serial number	Yes	Bill of lading/Air Waybill,	information
	printed on any tamper-evident		Meat Transfer Certificate	visit the
	seal issued by the Department.		(MTC), Official seal,	Australian
			Processing plant production	<u>Government</u> Federal
			management system	Register of
				Legislation.
Serial Number	Encoded in the GS1 barcode, this	Yes	Carcase Ticket, Processing	For more
	is a code, numeric or		plant production	information visit the GS1
	alphanumeric, assigned to an		management system	website.
	individual instance of an item for			
	its lifetime.			
Shipping Mark	Also known as a port mark, this is	Yes	Bill of lading/Air Waybill,	
	a code comprising of three letters		Delivery Docket/Manifest,	
	representing the foreign		Export Health Certificate,	
	establishment number and the		Meat Messaging	
	last nine digits of the consignment		Consignment Report,	
	SSCC.		Processing plant production	
			management system,	
			Certificate of Analysis	
			(COA)	
To Establishment	A number issued by Federal and	Yes	Meat Transfer Certificate	
number	State Authorities to identify the		(MTC), Processing plant	
	originating site from which meat		production management	
	or meat products were distributed		system	
	to domestic or export markets. For			
	transfer certificates, the			
	Establishment numbers for both			
	the dispatching and receiving			
	establishments are recorded.			
Trade description	This is a collective set of words	Yes	Carcase Ticket, Delivery	
	that says what the product is and		Docket/Manifest, Export	
	may include information such as		Health Certificate, Meat	
	species, net weight of product,		Messaging Consignment	
	name and address of		Report, Meat Transfer	
	establishments, category ciphers,		Certificate (MTC),	
	market endorsements, MSA eating		Processing plant production	
	quality etc.		management system	
Transfer Certificate	A unique certificate number	Yes	Meat Messaging	For more
number	issued for traceability purposes.		Consignment Report, Meat	information visit the
			Transfer Certificate (MTC),	Department of
			Processing plant production	Agriculture,
			management system	Water and the Environment
				website.
Transport	The registration number of the	Yes	Bill of lading/Air Waybill,	
registration number	vehicle in which the animals or		Delivery Docket/Manifest,	
	product were transported. For		Export Health Certificate,	
	shipments of product this will be a		Meat Messaging	
	shipping container number.		Consignment Report, Meat	
		1	Transfer Certificate (MTC),	

			Processing plant production management system	
Analysis Date	This is the date on which a product sample was analysed.	Yes	Certificate of Analysis (COA), Processing plant production management system	
Certificate of Analysis number	A unique certificate number issued for traceability purposes.	Yes	Certificate of Analysis (COA), Processing plant production management system	

5.2.2.8.5 Regulatory and Industry Programs

- * Meat Standards Australia (MSA)
- * AUS-MEAT
- * Australian Meat Industry Council (AMIC)
- * Department of Agriculture
- * Meat Messaging
- * Other data sources
- * State food authority

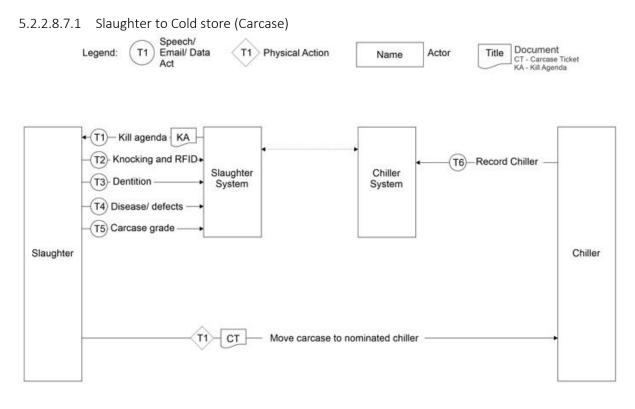
5.2.2.8.6 Supply Chain Node Traceability

Traceability of whole carcases back to the live animal is possible and can be done by the processing establishment where the animal was slaughtered. Here, carcases are issued a carcase ticket which correlates to the live animal NLIS ID tag and contains key information, including body number, processing establishment number and production date or 'kill date'. This information is uploaded to the NLIS Database, by the processor, under the processing establishments Property Identification Code (PIC). Thus, whole carcases (identified with a unique serialised carcase ticket) within a processing facility, chiller, cold store, or that are loaded for export or transport to other premises (e.g., retail) are fully traceable back to the individual live animal and property of origin.

5.2.2.8.7 Data flow diagrams

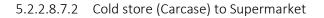
Direction	Description
Input	Slaughter to Cold store (Carcase)
Output	Cold store (Carcase) to Supermarket
Output	Cold store (Carcase) to Butcher
Output	Cold store (Carcase) to Food Service
Output	Cold store (Carcase) to Third-Party Cold Store
Output	Cold store (Carcase) to Value Adding

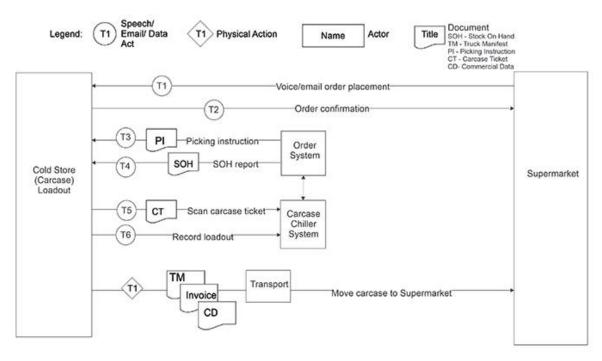
Table 75. Data flow diagrams for the inputs and outputs of a beef cold store (carcase) system.



Slaughter to Chiller

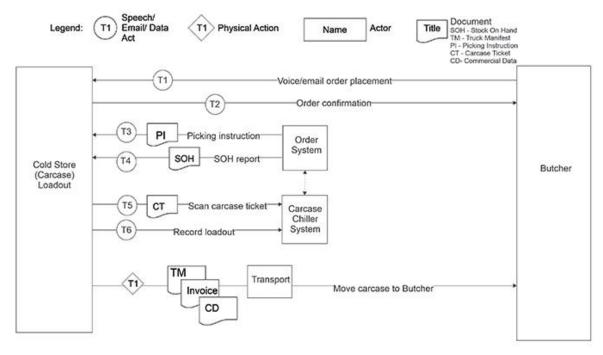
Figure 79. Data or information flows from the slaughter to chiller systems in the beef supply chain.





Cold Store (Carcase) to Supermarket

Figure 80. Data or information flows from the cold store (carcase) to supermarket systems in the beef supply chain.

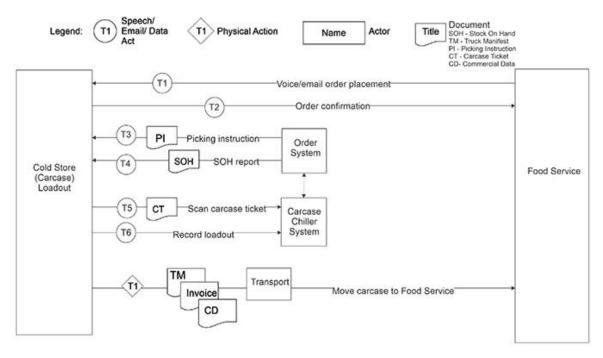


5.2.2.8.7.3 Cold store (Carcase) to Butcher

Cold Store (Carcase) to Butcher

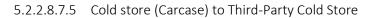
Figure 81. Data or information flows from the cold store (carcase) to butcher systems in the beef supply chain.

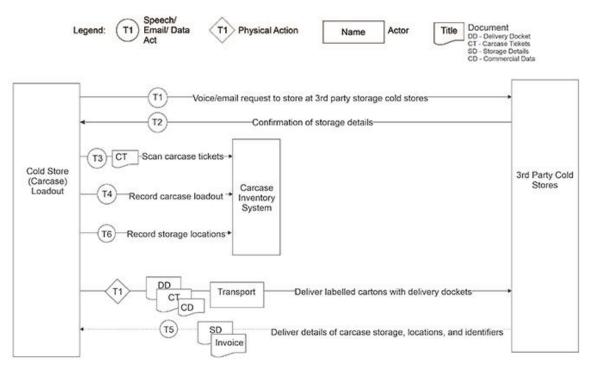
5.2.2.8.7.4 Cold store (Carcase) to Food Service



Cold Store (Carcase) to Food Service

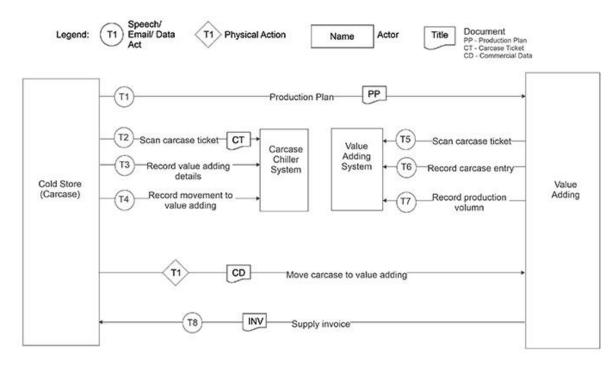
Figure 82. Data or information flows from the cold store (carcase) to food service systems in the beef supply chain.





Carcase Loadout to 3rd Party Storage Cold Stores

Figure 83. Data or information flows from the cold store (carcase) to third-party cold store systems in the beef supply chain.



5.2.2.8.7.6 Cold store (Carcase) to Value Adding

Cold Store (Carcase) to Value Adding

Figure 84. Data or information flows from the cold store (carcase) to value adding systems in the beef supply chain.

5.2.2.9 Cold store (cartons)

Storing chilled carcases or carcase products (e.g., cartons) typically provides a stock buffer between production and dispatch of product intended for domestic or export markets. A cold storage system involves refrigerated chambers that can chill or freeze any perishable product for a period of time before dispatch. During this process, ageing of meat also occurs, progressively increasing tenderness and flavour. Storage rooms must take into account the storage requirements for different products as well as rules for loading, maintenance and hygiene of storage equipment. Cartons, identified by unique GS1 barcoded carton labels, are palletised with each pallet being identified by a unique GS1 barcoded pallet label. These pallets are loaded onto pallet racking for storage in the chiller system.

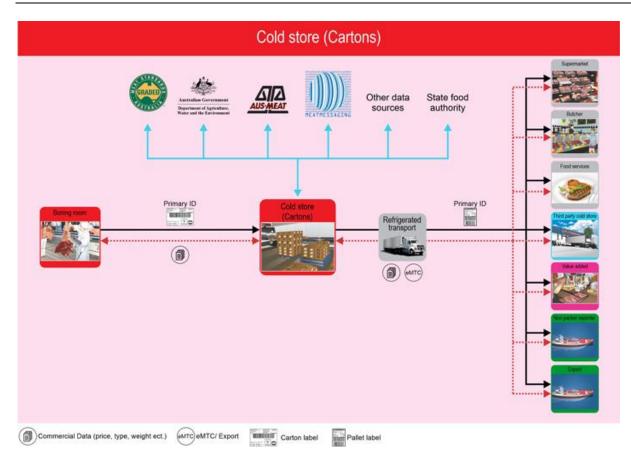


Figure 85. Inputs and outputs of the beef supply chain cold store (cartons) sector.

5.2.2.9.1 Physical Inputs including Critical Tracking Events (CTEs)

The physical inputs into the carton cold storage unit include cartons and pallets comprising of boned product that has been passed as safe for human consumption by an Authorised Officer. Critical Tracking Event related documents accompanying these inputs may include the carton and pallet labels. This information is recorded in the processing plants production management system.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with inputs to the cold store (cartons) system include the receival of:

- * Carton
- * Pallet.

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Carton	This is a case, crate, or barrel of product.	Carton label, Official seal, Processing plant production management system	
Pallet	A logistic unit which includes a number of cartons or goods items packed together for transport or storage purposes.	SSCC/Pallet label, Processing plant production management system	

Table 76. Physical inputs and associated Critical Tracking Event related documents for a beef cold store (cartons) system.

5.2.2.9.2 Information Inputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). There are a number of information inputs associated with the movement of product into the carton cold storage system. These are largely included on the carton and pallet labels and are Key Data Elements encapsulated by the GS1 barcode, as well as other information required by federal legislation.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Carton label, Processing plant production management system, SSCC/Pallet label	
Consignment Serial Shipping Container Code (SSCC)	Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., shipment/message that is assigned by the establishment constructing the unit. The SSCC remains the same for the life of the logistic unit.	Yes	Processing plant production management system, SSCC/Pallet label	For more information visit the GS1 website.
Count of Trade Items	Usually encoded in the GS1 barcode, this is the number of trade items e.g., cartons in the logistic unit.	Yes	Processing plant production management system, SSCC/Pallet label	
From Establishment number	A number issued by Federal and State Authorities to identify the originating site from which meat or meat products were distributed to domestic or export markets. For transfer certificates, the Establishment numbers for both the dispatching and receiving establishments are recorded.	Yes	Carton label, Processing plant production management system, SSCC/Pallet label	
Global Trade Item Number (GTIN)	Encoded in the GS1 barcode, the GTIN is a globally unique 14-digit number used to identify trade items, products, or services.	Yes	Carton label, Processing plant production management system,	For more information visit the GS1 website.

Table 77. Information inputs, Key Data Elements and Critical Tracking Event related documentation for a beef cold store (cartons) system.

			SSCC/Pallet label	
GTIN of Contained Trade Items	Encoded in the GS1 barcode, the GTIN of the contained trade items is a globally unique 14- digit number used to identify trade items, products, or services in the logistic unit.	Yes	Processing plant production management system, SSCC/Pallet label	For more information visit the GS1 website.
Net Weight (Kilograms)	Usually encoded in the GS1 barcode, the Net Weight is a variable measure of the trade item e.g., carton, pallet or shipment recorded in kilograms.	Yes	Carton label, Processing plant production management system, SSCC/Pallet label	For more information visit the GS1 website.
Official mark	Any stamp, seal, label, or mark that is declared by the regulations to be an official mark. An official mark signifies that the product has been inspected by and approved as safe for human consumption by an Authorised Officer.	Yes	Carton label, SSCC/Pallet label	For more information visit the Australian Government Federal Register of Legislation.
Packaging Date	Encoded in the GS1 barcode, the Packaging Date is the date on which the item was packaged and is recorded in the format year, month, day (YYMMDD).	Yes	Carton label, Processing plant production management system, SSCC/Pallet label	For more information visit the GS1 website.
Packaging Date Range	This includes the oldest and newest packaging dates for the logistic unit.	Yes	Processing plant production management system, SSCC/Pallet label	For more information visit the GS1 website.
Pallet Serial Shipping Container Code (SSCC)	Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., pallet that is assigned by the establishment constructing the unit. The SSCC remains the same for the life of the logistic unit.	Yes	Processing plant production management system, SSCC/Pallet label	For more information visit the GS1 website.
Seal Serial Number	This is a unique serial number printed on any tamper-evident seal issued by the Department.	Yes	Official seal, Processing plant production management system	For more information visit the Australian Government Federal Register of Legislation.

Serial Number	Encoded in the GS1 barcode, this is a code, numeric or alphanumeric, assigned to an individual instance of an item for its lifetime.	Yes	Carton label, Processing plant production management system	For more information visit the GS1 website.
Shipping Mark	Also known as a port mark, this is a code comprising of three letters representing the foreign establishment number and the last nine digits of the consignment SSCC.	Yes	Processing plant production management system, SSCC/Pallet label	
Trade description	This is a collective set of words that says what the product is and may include information such as species, net weight of product, name and address of establishments, category ciphers, market endorsements, MSA eating quality etc.	Yes	Carton label, Processing plant production management system, SSCC/Pallet label	
Lot number	A lot is a number assigned by the processor to each group of cattle consigned to slaughter and is usually vendor specific.	Yes	Carcase Ticket, Processing plant production management system	

5.2.2.9.3 Physical Outputs including Critical Tracking Events (CTEs)

The physical outputs of the carton cold storage system include cartons and pallets, these may be loaded into container system units for transport. Documents accompanying the movement of outputs of the cold storage system include those such as the delivery docket/manifest, Meat Transfer Certificate (MTC) and Meat Messaging Consignment Report.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with the outputs of the cold store (cartons) system include the movement of:

- * Carton
- * Pallet
- * Container System Unit

off the property, premises, or supply chain sector.

 Table 78. Physical outputs and associated Critical Tracking Event related documents for a beef cold store (cartons) system.

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Carton	This is a case, crate, or barrel of product.	Carton label, Delivery Docket/Manifest, Meat Transfer Certificate (MTC), Official seal, Processing plant production management system, Receipt of purchase/Tax Invoice	

Pallet	A logistic unit which includes a number of cartons or goods items packed together for transport or storage purposes.	Bill of lading/Air Waybill, Delivery Docket/Manifest, Export Health Certificate, Export Permit, Meat Transfer Certificate (MTC), Processing plant production management system, Receipt of purchase/Tax Invoice, SSCC/Pallet label, Certificate of Analysis (COA)	
Container System Unit	A container designed for use as a unit of cargo handling equipment in the transport of goods by aircraft or ship.	Bill of lading/Air Waybill, Delivery Docket/Manifest, Export Health Certificate, Export Permit, Meat Messaging Consignment Report, Meat Transfer Certificate (MTC), Official seal, Processing plant production management system, Receipt of purchase/Tax Invoice, Certificate of Analysis (COA)	

5.2.2.9.4 Information Outputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). The information outputs relating to the movement of outputs of the cold storage system is derived from CTE documentation ranging from Receipt of purchase/Tax Invoices to the Bill of lading/Air Waybill and Meat Messaging Consignment Reports. This information will be stored in the processing plants production management system.

Attributes (including	Description of the Attributes	ls a	Critical Tracking Event (CTE)	More details
KDEs)	(including KDEs)	KDE	related documents (including	
			electronic)	
Bill of lading/Air	A unique document number	Yes	Bill of lading/Air Waybill,	
Waybill document	issued for traceability purposes.		Processing plant production	
number			management system,	
			Certificate of Analysis (COA)	
Company/product	This is an in-house code for the	Yes	Bill of lading/Air Waybill,	
code	identification of the product in		Carton label, Processing plant	
	the unit.		production management	
			system, Receipt of	
			purchase/Tax Invoice,	
			SSCC/Pallet label,	
			Company/product code	
Consignment Serial	Encoded in the GS1 barcode,	Yes	Bill of lading/Air Waybill,	For more
Shipping Container	this is a unique number which		Export clearance	information visit the GS1
Code (SSCC)	identifies the individual logistic		documentation, Meat	website.
	unit i.e., shipment/message that		Messaging Consignment	
	is assigned by the establishment		Report, Meat Transfer	
	constructing the unit. The SSCC		Certificate (MTC), Processing	
	remains the same for the life of		plant production	
	the logistic unit.		management system,	
			SSCC/Pallet label	
Contract number	This is a unique number	Yes	Delivery Docket/Manifest,	
	allocated to the contract by the		Processing plant production	
	seller.		management system	
Count of Pallets	This is the number of pallets in	Yes	Meat Messaging	
	the logistic unit e.g., container		Consignment Report,	
	system unit.			

Table 79. Information outputs, Key Data Elements and Critical Tracking Event related documentation for a beef cold store (cartons) system.

			Processing plant production	
			management system	
Count of Trade	Usually encoded in the GS1	Yes	Bill of lading/Air Waybill,	For more
Items	barcode, this is the number of		Delivery Docket/Manifest,	information
	trade items e.g., cartons in the		Meat Messaging	visit the GS1
	logistic unit.		Consignment Report,	website.
			Processing plant production	
			management system,	
			SSCC/Pallet label	
Date	This is the date of signing or of	Yes	Bill of lading/Air Waybill,	
Date	which a record entry or	103	Delivery Docket/Manifest,	
	transaction was made.		Export clearance	
	transaction was made.		documentation, Meat	
			Messaging Consignment	
			Report, Meat Transfer	
			Certificate (MTC), Processing	
			plant production	
			management system, Receipt	
			of purchase/Tax Invoice,	
			Certificate of Analysis (COA)	
Delivery	This is a unique number	Yes	Delivery Docket/Manifest,	
Docket/Manifest	allocated to the docket for		Processing plant production	
number	identification purposes.		management system	_
Export Health	A unique number allocated to	Yes	Export Health Certificate,	For more information
Certificate Number	the health certificate issued for		Meat Messaging	visit the
	the export consignment for		Consignment Report,	Australian
	traceability purposes.		Processing plant production	Government
			management system	Federal Register of
				Legislation.
Export Permit	A unique permit number is	Yes	Export Permit, Processing	For more
Number	allocated for the export		plant production	information
	consignment following		management system	<u>visit the</u> Australian
	submission of a correct and			Government
	validated Request For Permit			Federal
	(RFP) which is then approved by			Register of Legislation.
	the Secretary.			Legislation.
From Establishment	A number issued by Federal and	Yes	Carton label, Delivery	
number	State Authorities to identify the		Docket/Manifest, Export	
	originating site from which meat		clearance documentation,	
	or meat products were		Export Health Certificate,	
	distributed to domestic or		Meat Messaging	
	export markets. For transfer		Consignment Report, Meat	
	certificates, the Establishment		Transfer Certificate (MTC),	
	numbers for both the		Processing plant production	
	dispatching and receiving		management system,	
	establishments are recorded.		SSCC/Pallet label, Certificate	
			of Analysis (COA)	
Global Trade Item	Encoded in the GS1 barcode, the	Yes	Carton label, Meat Messaging	For more
Number (GTIN)	GTIN is a globally unique 14-	103	Consignment Report,	information
	digit number used to identify			visit the GS1
			Processing plant production	website.
	trade items, products, or		management system, SSCC/Pallet label	
	services.		SSCC/ Fallet IdDel	

CTIN of Contained	Encoded in the CC1 horseds, the	Vee		For more
GTIN of Contained Trade Items	Encoded in the GS1 barcode, the GTIN of the contained trade	Yes	Processing plant production	information
frade items			management system,	visit the GS1
	items is a globally unique 14-		SSCC/Pallet label	website.
	digit number used to identify			
	trade items, products, or			
	services in the logistic unit.	N		
Movement date	The date on which livestock or	Yes	Bill of lading/Air Waybill,	
	other products (e.g., feed or		Delivery Docket/Manifest,	
	meat products) were		Export clearance	
	transported between		documentation, Export	
	PICs/establishments.		Health Certificate, Meat	
			Transfer Certificate (MTC),	
			Processing plant production	
			management system,	
			Certificate of Analysis (COA)	For more
MSA Licence	Any establishment consigning,	Yes	Processing plant production	information on
Number	supplying, or identifying MSA		management system, Receipt	MSA visit the
	Certified Product must be		of purchase/Tax Invoice	MLA website.
	registered and have a unique			
	MSA Licence Number.			Formore
Net Weight	Usually encoded in the GS1	Yes	Bill of lading/Air Waybill,	For more information
(Kilograms)	barcode, the Net Weight is a variable measure of the trade		Carton label, Export Health	visit the GS1
			Certificate, Meat Messaging	website.
	item e.g., carton, pallet or		Consignment Report,	
	shipment recorded in kilograms.		Processing plant production	
			management system,	
		N	SSCC/Pallet label	For more
Official mark	Any stamp, seal, label, or mark	Yes	Carton label, SSCC/Pallet	information
	that is declared by the		label	visit the
	regulations to be an official			Australian
	mark. An official mark signifies			Government Federal
	that the product has been			Register of
	inspected by and approved as			Legislation.
	safe for human consumption by an Authorised Officer.			
Order date	This is the date on which the	Yes	Delivery Docket/Manifest,	
Under date	purchase order or contract was	res	Processing plant production	
	raised by the buyer.			
Dackaging Data	Encoded in the GS1 barcode, the	Voc	management system	For more
Packaging Date		Yes	Carton label, Processing plant	information
	Packaging Date is the date on which the item was packaged		production management system, SSCC/Pallet label,	visit the GS1
	and is recorded in the format		• • • • • • • • • • • • • • • • • • •	website.
			Certificate of Analysis (COA)	
Packaging Date	year, month, day (YYMMDD). This includes the oldest and	Yes	Export clearance	
		105	documentation, Processing	
Range	newest packaging dates for the		plant production	
	logistic unit.		management system,	
			SSCC/Pallet label	
Pallet Serial Shipping	Encoded in the GS1 barcode,	Yes	Export clearance	For more
Container Code	this is a unique number which	105	documentation, Meat	information
(SSCC)	identifies the individual logistic		Messaging Consignment	visit the GS1
(3300)	-		Report, Meat Transfer	website.
	unit i.e., pallet that is assigned by the establishment		• · · · · · · · · · · · · · · · · · · ·	
	by the establishment		Certificate (MTC), Processing	

Production Date (YYMMDD) Recipient Australian Business Number (ABN) Seller/Supplier	constructing the unit. The SSCC remains the same for the life of the logistic unit. Encoded in the GS1 barcode, this is the 'kill' or slaughter' date of the product and is recorded in the format year, month, day (YYMMDD). This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses. This is an 11-digit registration	Yes Yes Yes	plant production management system, SSCC/Pallet labelMeat Transfer Certificate (MTC), Processing plant production management systemProcessing plant production management system, Receipt of purchase/Tax InvoiceProcessing plant production	For more information visit the GS1 website. For more information visit the ATO website. For more
Australian Business Number (ABN)	number, issued by the Australian Tax Office, used to identify businesses.		management system, Receipt of purchase/Tax Invoice	information visit the ATO website.
Seal Serial Number	This is a unique serial number printed on any tamper-evident seal issued by the Department.	Yes	Bill of lading/Air Waybill, Export clearance documentation, Meat Transfer Certificate (MTC), Official seal, Processing plant production management system	For more information visit the Australian Government Federal Register of Legislation.
Serial Number	Encoded in the GS1 barcode, this is a code, numeric or alphanumeric, assigned to an individual instance of an item for its lifetime.	Yes	Carton label, Processing plant production management system	For more information visit the GS1 website.
Shipping Mark	Also known as a port mark, this is a code comprising of three letters representing the foreign establishment number and the last nine digits of the consignment SSCC.	Yes	Bill of lading/Air Waybill, Delivery Docket/Manifest, Export Health Certificate, Meat Messaging Consignment Report, Processing plant production management system, SSCC/Pallet label, Certificate of Analysis (COA)	
To Establishment number	A number issued by Federal and State Authorities to identify the originating site from which meat or meat products were distributed to domestic or export markets. For transfer certificates, the Establishment numbers for both the dispatching and receiving establishments are recorded.	Yes	Export clearance documentation, Meat Transfer Certificate (MTC), Processing plant production management system	
Trade description	This is a collective set of words that says what the product is and may include information such as species, net weight of product, name and address of establishments, category	Yes	Carton label, Delivery Docket/Manifest, Export clearance documentation, Export Health Certificate, Meat Messaging Consignment Report, Meat	

	ciphers, market endorsements, MSA eating quality etc.		Transfer Certificate (MTC), Processing plant production management system, SSCC/Pallet label	
Transfer Certificate number	A unique certificate number issued for traceability purposes.	Yes	Meat Messaging Consignment Report, Meat Transfer Certificate (MTC), Processing plant production management system	For more information visit the Department of Agriculture, Water and the Environment website.
Transport registration number	The registration number of the vehicle in which the animals or product were transported. For shipments of product this will be a shipping container number.	Yes	Bill of lading/Air Waybill, Delivery Docket/Manifest, Export clearance documentation, Export Health Certificate, Meat Messaging Consignment Report, Meat Transfer Certificate (MTC), Processing plant production management system	
Analysis Date	This is the date on which a product sample was analysed.	Yes	Certificate of Analysis (COA), Processing plant production management system	
Certificate of Analysis number	A unique certificate number issued for traceability purposes.	Yes	Certificate of Analysis (COA), Processing plant production management system	

5.2.2.9.5 Regulatory and Industry Programs

- * Meat Standards Australia (MSA)
- * AUS-MEAT
- * Australian Meat Industry Council (AMIC)
- * Department of Agriculture
- * Meat Messaging
- * Other data sources
- * State food authority

5.2.2.9.6 Supply Chain Node Traceability

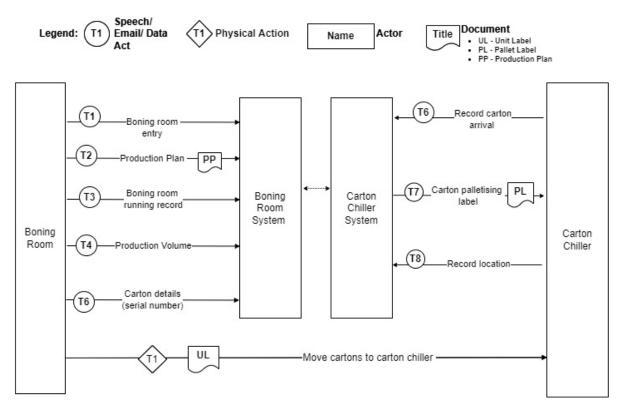
Traceability for cartoned and palletised product is limited to the carcases that have entered the boning room for the production run of cartons that are created. For example, 200 carcases (400 sides) individually identified with unique carcase tickets enter the boning room for a specific boning run. These carcase tickets are linked to the specific boning run. From these carcases, 3 200 cartons of primal cuts and 1 000 cartons of trim and other highly mixed products are created. While all cartons are identified with unique serialised carton labels, including a GS1 meat industry barcode, linked to the boning run (and may be packaged into pallets containing unique serialised pallet labels including a GS1 SSCC barcode), it is not readily possible to identify which carcases are in which cartons as the cartons will contain meat products from different carcases. If the carcases were sourced from several different properties, the resulting carton can only be traced to a number of possible carcases and source properties.

5.2.2.9.7 Data flow diagrams

Direction	Description
Input	Boning Room to Cold store (Carton)
Output	Cold store (Carton) to Supermarket
Output	Cold store (Carton) to Butcher
Output	Cold store (Carton) to Food Service
Outrut	Cold store (Conton) to Third Douts Cold Store
Output	Cold store (Carton) to Third-Party Cold Store
Output	Cold store (Carton) to Value Adding

Table 80. Data flow diagrams for the inputs and outputs of a beef cold store (cartons) system.

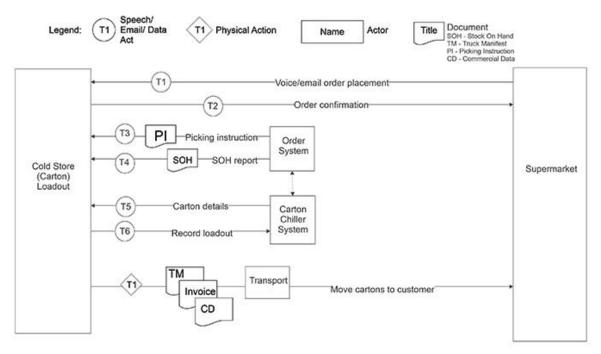
5.2.2.9.7.1 Boning Room to Cold store (Carton)



Boning Room to Carton Chiller

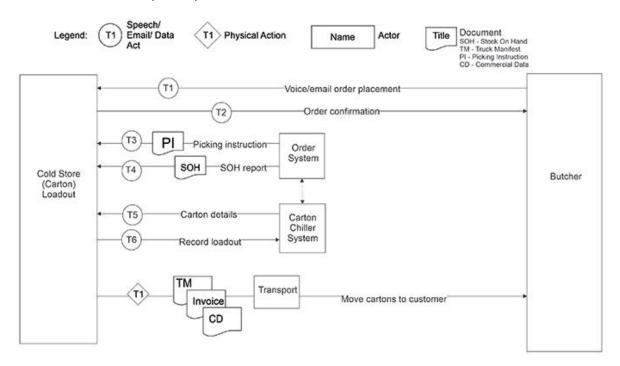
Figure 86. Data or information flows from the boning room to cold store (carton) systems in the beef supply chain.

5.2.2.9.7.2 Cold store (Carton) to Supermarket



Cold Store (Carton) Loadout to Supermarket

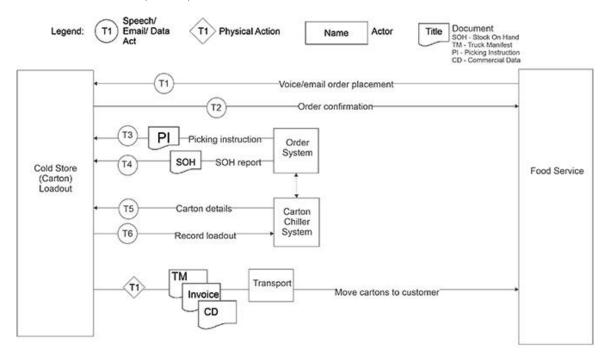
Figure 87. Data or information flows from the cold store (carton) loadout to supermarket systems in the beef supply chain.



5.2.2.9.7.3 Cold store (Carton) to Butcher

Cold Store (Carton) Loadout to Butcher

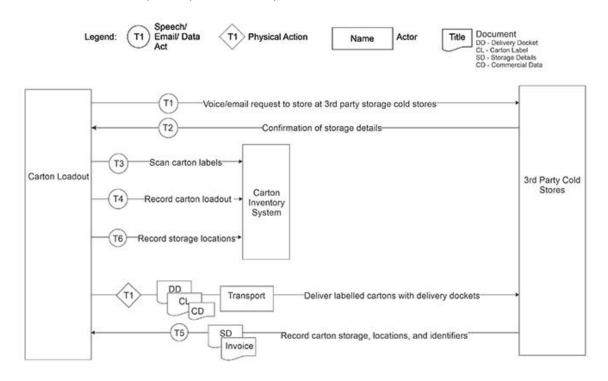
Figure 88. Data or information flows from the cold store (carton) loadout to butcher systems in the beef supply chain.



5.2.2.9.7.4 Cold store (Carton) to Food Service

Cold Store (Carton) Loadout to Food Service

Figure 89. Data or information flows from the cold store (carton) loadout to food service systems in the beef supply chain.

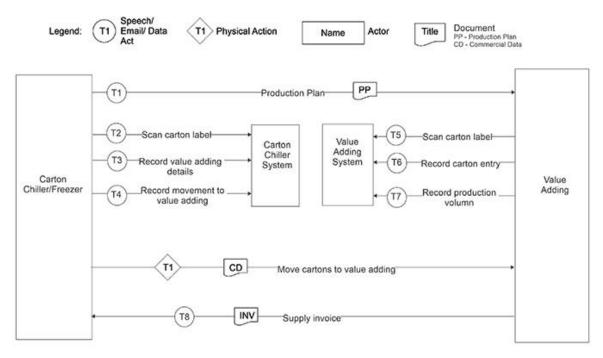


5.2.2.9.7.5 Cold store (Carton) to Third-Party Cold Store

Carton Loadout to 3rd Party Storage Cold Stores

Figure 90. Data or information flows from the cold store (carton) loadout to third-party cold store systems in the beef supply chain.

5.2.2.9.7.6 Cold store (Carton) to Value Adding



Carton Chiller/Freezer to Value Adding

Figure 91. Data or information flows from the cold store (carton) loadout to value adding systems in the beef supply chain.

5.2.3 Exporting Country - National distribution

5.2.3.1 Independent boning room

Boning is a process or procedure whereby meat is removed from carcases or carcase parts, or bone-in or boneless meat cuts are produced. The boning room is the location where these activities occur. An independent boning room is an establishment, separate from a processing establishment, which performs activities the same as that for a boning room integrated into a processing plant. Typically, carcases enter the boning room after chilling and refrigerated transport and are broken down into portions and cuts such as primal, sub-primal and trim cuts. This process is very critical, as any errors in cutting can decrease the value of a cut and impact directly on profit. Additionally, there is a high risk of cross contamination to the cuts, and health and safety risks to workers operating the boning room tools and machinery.

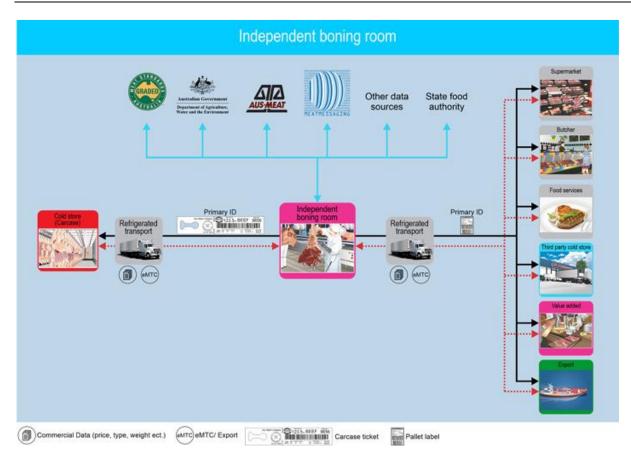


Figure 92. Inputs and outputs of the beef supply chain independent boning room sector.

5.2.3.1.1 Physical Inputs including Critical Tracking Events (CTEs)

Physical inputs into the boning room include carcasses transported from the cold store (carcase) system. Critical Tracking Event related documentation includes articles pertaining to the identification of individual products e.g., Carcase Ticket, the movement of carcases e.g., MTC and the purchase of carcases e.g., Receipt of purchase/Tax Invoice.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with inputs to the independent boning room system include the receival of:

* Carcase.

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Carcase	The body of a slaughtered animal after bleeding. Becomes a dressed carcase when hide, head, feet and offal are removed.	Carcase Ticket, Delivery Docket/Manifest, Meat Transfer Certificate (MTC), MSA Carcase Ticket, Independent boning room production management system, Receipt of purchase/Tax Invoice	

Table 81. Physical inputs and associated Critical Tracking Event related documents for a beef independent boning room system.

5.2.3.1.2 Information Inputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). Information inputs or KDEs drawn from CTE documentation accompanying the movement of carcases to the independent boning room include items such as the establishment number, the date of movement, GS1 barcode application identifiers and the transport registration number.

Table 82. Information inputs, Key Data Elements and Critical Tracking Event related documentation for a beef independent boning room system.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Body number	This is a number assigned to each carcase by the processor for identification purposes.	Yes	Carcase Ticket, Independent Boning Room production management system	
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Independent Boning Room production management system, Receipt of purchase/Tax Invoice	
Consignment Serial Shipping Container Code (SSCC)	Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., shipment/message that is assigned by the establishment constructing the unit. The SSCC remains the same for the life of the logistic unit.	Yes	Independent Boning Room production management system, Meat Transfer Certificate (MTC)	
Contract number	This is a unique number allocated to the contract by the seller.	Yes	Delivery Docket/Manifest, Independent Boning Room production management system	
Count of Trade Items	Usually encoded in the GS1 barcode, this is the number of trade items e.g., cartons in the logistic unit.	Yes	Delivery Docket/Manifest Independent, Boning Room production management system	For more information visit the GS1 website.
Date	This is the date of signing or of which a record entry or transaction was made.	Yes	Delivery Docket/Manifest, Independent Boning Room production management system, Meat Transfer Certificate (MTC), Receipt of purchase/Tax Invoice	
Delivery Docket/Manifest number	This is a unique number allocated to the docket for identification purposes.	Yes	Delivery Docket/Manifest, Independent Boning Room production management system	

	A standard to the first set of	Maria		
From Establishment	A number issued by Federal and	Yes	Carcase Ticket, Delivery	
number	State Authorities to identify the		Docket/Manifest,	
	originating site from which meat or		Independent Boning	
	meat products were distributed to		Room production	
	domestic or export markets. For		management system,	
	transfer certificates, the		Meat Transfer Certificate	
	Establishment numbers for both the		(MTC)	
	dispatching and receiving			
	establishments are recorded.	Maria		For more
Global Trade Item	Encoded in the GS1 barcode, the	Yes	Carcase Ticket,	information visit
Number (GTIN)	GTIN is a globally unique 14-digit		Independent Boning	the GS1 website.
	number used to identify trade		Room production	
1.1	items, products, or services.	Maria	management system	
Lot number	A lot is a number assigned by the	Yes	Carcase Ticket,	
	processor to each group of cattle		Independent Boning	
	consigned to slaughter and is		Room production	
Mayon ant data	usually vendor specific. The date on which livestock or	Vee	management system	
Movement date		Yes	Delivery	
	other products (e.g., feed or meat		Docket/Manifest,	
	products) were transported between PICs/establishments.		Independent Boning	
	between Pics/establishments.		Room production	
			management system, Meat Transfer Certificate	
			(MTC)	
MSA eating quality	This identifies carcases with similar	Yes	Independent Boning	For more
group/grade	MSA and eating quality grades,	105	Room production	information on
Broup/Brade	these may align with brands packed		management system,	MSA visit the
	by the processor for logistic		MSA Carcase Ticket	MLA website.
	simplicity. Carcases are grouped for		Nis, Carcase Heree	
	boning according to eating quality			
	grades.			
MSA Licence	Any establishment consigning,	Yes	Independent Boning	For more
Number	supplying, or identifying MSA		Room production	information on
	Certified Product must be		management system,	MSA visit the MLA website.
	registered and have a unique MSA		Receipt of purchase/Tax	
	Licence Number.		Invoice	
Net Weight	Usually encoded in the GS1	Yes	Carcase Ticket,	For more
(Kilograms)	barcode, the Net Weight is a		Independent Boning	information visit the GS1 website.
	variable measure of the trade item		Room production	the GOT website.
	e.g., carton, pallet or shipment		management system	
	recorded in kilograms.			
Official mark	Any stamp, seal, label, or mark that	Yes	Carcase Ticket,	For more
	is declared by the regulations to be		Independent Boning	information visit the Australian
	an official mark. An official mark		Room production	Government
	signifies that the product has been		management system	Federal Register
	inspected by and approved as safe			of Legislation.
	for human consumption by an			
	Authorised Officer.	ļ		
Order date	This is the date on which the	Yes	Delivery	
	purchase order or contract was		Docket/Manifest,	
	raised by the buyer.		Independent Boning	
			Room production	
		1	management system	

				Formere
Pallet Serial	Encoded in the GS1 barcode, this is	Yes	Independent Boning	For more information visit
Shipping Container	a unique number which identifies		Room production	the GS1 website.
Code (SSCC)	the individual logistic unit i.e., pallet		management system,	
	that is assigned by the		Meat Transfer Certificate	
	establishment constructing the unit.		(MTC)	
	The SSCC remains the same for the			
	life of the logistic unit.			-
Production Date	Encoded in the GS1 barcode, this is	Yes	Carcase Ticket,	For more information visit
(YYMMDD)	the 'kill' or slaughter' date of the		Independent Boning	the GS1 website.
	product and is recorded in the		Room production	
	format year, month, day		management system,	
	(YYMMDD).		Meat Transfer Certificate	
		~	(MTC)	Formore
Recipient Australian	This is an 11-digit registration	Yes	Independent Boning	For more information visit
Business Number	number, issued by the Australian		Room production	the ATO website.
(ABN)	Tax Office, used to identify		management system,	
	businesses.		Receipt of purchase/Tax	
Seal Serial Number	This is a unique serial number	Vac	Invoice	For more
Seal Serial Number	This is a unique serial number	Yes	Independent Boning Room production	information visit
	printed on any tamper-evident seal issued by the Department.			the Australian
	issued by the Department.		management system, Meat Transfer Certificate	<u>Government</u> Federal Register
			(MTC)	of Legislation.
Soller/Supplier	This is an 11 digit registration	Yes		For more
Seller/Supplier Australian Business	This is an 11-digit registration number, issued by the Australian	res	Independent Boning Room production	information visit
	Tax Office, used to identify		•	the ATO website.
Number (ABN)	businesses.		management system, Receipt of purchase/Tax	
	businesses.		Invoice	
Serial Number	Encoded in the GS1 barcode, this is	Yes	Carcase Ticket,	For more
	a code, numeric or alphanumeric,	100	Independent Boning	information visit
	assigned to an individual instance of		Room production	the GS1 website.
	an item for its lifetime.		management system	
Shipping Mark	Also known as a port mark, this is a	Yes	Delivery	
	code comprising of three letters		Docket/Manifest,	
	representing the foreign		Independent Boning	
	establishment number and the last		Room production	
	nine digits of the consignment SSCC.		management system	
To Establishment	A number issued by Federal and	Yes	Independent Boning	
number	State Authorities to identify the		Room production	
	originating site from which meat or		management system,	
	meat products were distributed to		Meat Transfer Certificate	
	domestic or export markets. For		(MTC)	
	transfer certificates, the			
	Establishment numbers for both the			
	dispatching and receiving			
	establishments are recorded.			
Trade description	This is a collective set of words that	Yes	Carcase Ticket, Delivery	
	says what the product is and may		Docket/Manifest,	
	include information such as species,		Independent Boning	
	net weight of product, name and		Room production	
	address of establishments, category		management system,	
	ciphers, market endorsements, MSA		Meat Transfer Certificate	
	cipiters, market endorsements, work			

Transfer Certificate number	A unique certificate number issued for traceability purposes.	Yes	Independent Boning Room production management system, Meat Transfer Certificate (MTC)	For more information visit the Department of Agriculture, Water and the Environment website.
Transport registration number	The registration number of the vehicle in which the animals or product were transported. For shipments of product this will be a shipping container number.	Yes	Delivery Docket/Manifest, Independent Boning Room production management system, Meat Transfer Certificate (MTC)	

5.2.3.1.3 Physical Outputs including Critical Tracking Events (CTEs)

The outputs of the independent boning room are similar to that of boning rooms located at processing establishments and include carton and palletised product as well as product loaded into shipping containers for transport and export. These products must be accompanied by documentation such as the Delivery Docket/Manifest, Meat Transfer Certificate and Certificate of Analysis when sent direct for export.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with the outputs of the independent boning room system include the movement of:

- * Carton
- * Pallet
- * Container System Unit

off the property, premises, or supply chain sector.

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Carton	This is a case, crate, or barrel of product.	Carton label, Delivery Docket/Manifest, Meat Transfer Certificate (MTC), Official seal, Independent boning room production management system, Receipt of purchase/Tax Invoice	
Pallet	A logistic unit which includes a number of cartons or goods items packed together for transport or storage purposes.	Bill of lading/Air Waybill, Delivery Docket/Manifest, Export Health Certificate, Export Permit, Meat Transfer Certificate (MTC), Independent boning room production management system, Receipt of purchase/Tax Invoice, Certificate of Analysis (COA), SSCC/Pallet label	
Container System Unit	A container designed for use as a unit of cargo handling equipment in the transport of goods by aircraft or ship.	Bill of lading/Air Waybill, Delivery Docket/Manifest, Export Health Certificate, Export Permit, Meat Messaging Consignment Report, Meat Transfer Certificate (MTC), Official seal, Independent boning room production management system, Certificate of Analysis (COA), Receipt of purchase/Tax Invoice	

Table 83. Physical outputs and associated Critical Tracking Event related documents for a beef independent boning room system.

5.2.3.1.4 Information Outputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). Information included on the CTE documentation for independent boning room product includes KDEs such as serial number identifiers for key documentation, production and packaging dates, transportation registration, sending and receiving establishment details and GS1 application identifiers.

Table 84. Information outputs, Key Data Elements and Critical Tracking Event related documentation for a beef independent boning room system.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Analysis Date	This is the date on which a product sample was analysed.	Yes	Certificate of Analysis (COA), Independent Boning Room production management system	
Bill of lading/Air Waybill document number	A unique document number issued for traceability purposes.	Yes	Bill of lading/Air Waybill, Certificate of Analysis (COA), Independent Boning Room production management system	
Certificate of Analysis number	A unique certificate number issued for traceability purposes.	Yes	Certificate of Analysis (COA), Independent Boning Room production management system	
COA test lot identifier	This is a unique identifier allocated to all cartons, pallets, and shipping containers for which an analysis sample represents.	Yes	Certificate of Analysis (COA), Independent Boning Room production management system	
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Bill of lading/Air Waybill, Carton label, Certificate of Analysis (COA), Independent Boning Room production management system, Receipt of purchase/Tax Invoice, SSCC/Pallet label	
Consignment Serial Shipping Container Code (SSCC)	Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., shipment/message that is assigned by the establishment constructing the unit. The SSCC remains the same for the life of the logistic unit.	Yes	Bill of lading/Air Waybill, Independent Boning Room production management system, Meat Messaging Consignment Report, Meat Transfer Certificate (MTC), SSCC/Pallet label	For more information visit the GS1 website.
Contract number	This is a unique number allocated to the contract by the seller.	Yes	Delivery Docket/Manifest, Independent Boning Room production management system	
Count of Pallets	This is the number of pallets in the logistic unit e.g., container system unit.	Yes	Independent Boning Room production management system, Meat Messaging Consignment Report	

Count of Trodo	Havely areaded in the CC1	Vaa		For more
Count of Trade	Usually encoded in the GS1	Yes	Bill of lading/Air Waybill,	information visit
ltems	barcode, this is the number of		Delivery Docket/Manifest,	the GS1
	trade items e.g., cartons in the		Independent Boning Room	website.
	logistic unit.		production management	
			system, Meat Messaging	
			Consignment Report,	
			SSCC/Pallet label	
Date	This is the date of signing or of	Yes	Bill of lading/Air Waybill,	
	which a record entry or		Certificate of Analysis (COA),	
	transaction was made.		Delivery Docket/Manifest,	
			Independent Boning Room	
			production management	
			system, Meat Messaging	
			Consignment Report, Meat	
			Transfer Certificate (MTC),	
			Receipt of purchase/Tax	
			Invoice	
Delivery	This is a unique number allocated	Yes	Delivery Docket/Manifest,	
Docket/Manifest	to the docket for identification		Independent Boning Room	
number	purposes.		production management	
			system	F = = = = =
Export Health	A unique number allocated to the	Yes	Export Health Certificate,	For more information visit
Certificate Number	health certificate issued for the		Independent Boning Room	the Department
	export consignment for		production management	of Agriculture,
	traceability purposes.		system, Meat Messaging	Water and the Environment
			Consignment Report	website.
Export Permit	A unique permit number is	Yes	Export Permit, Independent	For more
Number	allocated for the export		Boning Room production	information visit the Department
	consignment following		management system	of Agriculture,
	submission of a correct and			Water and the
	validated Request For Permit			Environment
	(RFP) which is then approved by			website.
	the Secretary.			
From	A number issued by Federal and	Yes	Carton label, Certificate of	
Establishment	State Authorities to identify the		Analysis (COA), Delivery	
number	originating site from which meat		Docket/Manifest, Export	
	or meat products were		Health Certificate,	
	distributed to domestic or export		Independent Boning Room	
	markets. For transfer certificates,		production management	
	the Establishment numbers for		system, Meat Messaging	
	both the dispatching and		Consignment Report, Meat	
	receiving establishments are		Transfer Certificate (MTC),	
	recorded.		SSCC/Pallet label	
Global Trade Item	Encoded in the GS1 barcode, the	Yes	Carton label, Independent	For more
Number (GTIN)	GTIN is a globally unique 14-digit		Boning Room production	information visit the GS1
	number used to identify trade		management system, Meat	website.
	items, products, or services.		Messaging Consignment	
			Report, SSCC/Pallet label	
GTIN of Contained	Encoded in the GS1 barcode, the	Yes	Independent Boning Room	For more
Trade Items	GTIN of the contained trade		production management	information visit the GS1
	items is a globally unique 14-digit		system, SSCC/Pallet label	website.
	number used to identify trade			

	items, products, or services in the logistic unit.			
Movement date	The date on which livestock or other products (e.g., feed or meat products) were transported between PICs/establishments.	Yes	Bill of lading/Air Waybill, Certificate of Analysis (COA), Delivery Docket/Manifest, Export Health Certificate, Independent Boning Room production management system, Meat Transfer Certificate (MTC)	
MSA Licence Number	Any establishment consigning, supplying, or identifying MSA Certified Product must be registered and have a unique MSA Licence Number.	Yes	Independent Boning Room production management system, Receipt of purchase/Tax Invoice	For more information on MSA visit the MLA website.
Net Weight (Kilograms)	Usually encoded in the GS1 barcode, the Net Weight is a variable measure of the trade item e.g., carton, pallet or shipment recorded in kilograms.	Yes	Bill of lading/Air Waybill, Carton label, Export Health Certificate, Independent Boning Room production management system, Meat Messaging Consignment Report, SSCC/Pallet label	For more information visit the GS1 website.
Official mark	Any stamp, seal, label, or mark that is declared by the regulations to be an official mark. An official mark signifies that the product has been inspected by and approved as safe for human consumption by an Authorised Officer.	Yes	Carton label, Independent Boning Room production management system, SSCC/Pallet label	<u>For more</u> <u>information visit</u> <u>the Australian</u> <u>Government</u> <u>Federal</u> <u>Register of</u> <u>Legislation.</u>
Order date	This is the date on which the purchase order or contract was raised by the buyer.	Yes	Delivery Docket/Manifest, Independent Boning Room production management system	
Packaging Date	Encoded in the GS1 barcode, the Packaging Date is the date on which the item was packaged and is recorded in the format year, month, day (YYMMDD).	Yes	Carton label, Certificate of Analysis (COA), Independent Boning Room production management system, SSCC/Pallet label	For more information visit the GS1 website.
Packaging Date Range	This includes the oldest and newest packaging dates for the logistic unit.	Yes	Independent Boning Room production management system, SSCC/Pallet label	
Pallet Serial Shipping Container Code (SSCC)	Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., pallet that is assigned by the establishment constructing the unit. The SSCC remains the same for the life of the logistic unit.	Yes	Independent Boning Room production management system, Meat Messaging Consignment Report, Meat Transfer Certificate (MTC), SSCC/Pallet label	For more information visit the GS1 website.
Production Date (YYMMDD)	Encoded in the GS1 barcode, this is the 'kill' or slaughter' date of the product and is recorded in	Yes	Independent Boning Room production management	For more information visit the GS1 website.

	the format year, month, day (YYMMDD).		system, Meat Transfer Certificate (MTC)	
Recipient Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Independent Boning Room production management system, Receipt of purchase/Tax Invoice	For more information visit the ATO website.
Seal Serial Number	This is a unique serial number printed on any tamper-evident seal issued by the Department.	Yes	Bill of lading/Air Waybill, Independent Boning Room production management system, Meat Transfer Certificate (MTC), Official seal	For more information visit the Australian Government Federal Register of Legislation.
Seller/Supplier Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Independent Boning Room production management system, Receipt of purchase/Tax Invoice	For more information visit the ATO website.
Serial Number	Encoded in the GS1 barcode, this is a code, numeric or alphanumeric, assigned to an individual instance of an item for its lifetime.	Yes	Carton label, Independent Boning Room production management system	For more information visit the GS1 website.
Shipping Mark	Also known as a port mark, this is a code comprising of three letters representing the foreign establishment number and the last nine digits of the consignment SSCC.	Yes	Bill of lading/Air Waybill, Certificate of Analysis (COA), Delivery Docket/Manifest, Export Health Certificate, Independent Boning Room production management system, Meat Messaging Consignment Report, SSCC/Pallet label	
To Establishment number	A number issued by Federal and State Authorities to identify the originating site from which meat or meat products were distributed to domestic or export markets. For transfer certificates, the Establishment numbers for both the dispatching and receiving establishments are recorded.	Yes	Independent Boning Room production management system, Meat Transfer Certificate (MTC)	
Trade description	This is a collective set of words that says what the product is and may include information such as species, net weight of product, name and address of establishments, category ciphers, market endorsements, MSA eating quality etc.	Yes	Carton label, Delivery Docket/Manifest, Export Health Certificate, Independent Boning Room production management system, Meat Messaging Consignment Report, Meat Transfer Certificate (MTC), SSCC/Pallet label	
Transfer Certificate number	A unique certificate number issued for traceability purposes.	Yes	Independent Boning Room production management system, Meat Messaging	For more information visit the Department of Agriculture, Water and the

			Consignment Report, Meat Transfer Certificate (MTC)	Environment website.
Transport registration number	The registration number of the vehicle in which the animals or product were transported. For shipments of product this will be a shipping container number.	Yes	Bill of lading/Air Waybill, Delivery Docket/Manifest, Export Health Certificate, Independent Boning Room production management system, Meat Messaging Consignment Report, Meat Transfer Certificate (MTC)	

5.2.3.1.5 Regulatory and Industry Programs

- * Meat Standards Australia (MSA)
- * AUS-MEAT
- * Australian Meat Industry Council (AMIC)
- * Department of Agriculture
- * Meat Messaging
- * Other data sources
- * State food authority

5.2.3.1.6 Supply Chain Node Traceability

Traceability for cartoned and palletised product is limited to the carcases that have entered the boning room for the production run of cartons that are created. For example, 200 carcases (400 sides) individually identified with unique carcase tickets enter the boning room for a specific boning run. These carcase tickets are linked to the specific boning run. From these carcases, 3 200 cartons of primal cuts and 1 000 cartons of trim and other highly mixed products are created. While all cartons are identified with unique serialised carton labels, including a GS1 meat industry barcode, linked to the boning run (and may be packaged into pallets containing unique serialised pallet labels including a GS1 SSCC barcode), it is not readily possible to identify which carcases are in which cartons as the cartons will contain meat products from different carcases. If the carcases were sourced from several different properties, the resulting carton can only be traced to a number of possible carcases and source properties.

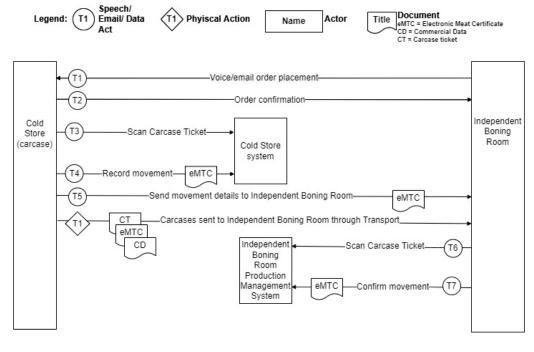
5.2.3.1.7 Data flow diagrams

Table 84. Data flow diagrams for the inputs and outputs of a beef cold store (cartons) system.

Direction	Description	
Input	Cold Store (Carcase) to Independent Boning Room	
Output	Independent Boning Room to Supermarket	
Output	Independent Boning Room to Butcher	
Output	Independent Boning Room to Food Service	
Output	Independent Boning Room to Third-Party Cold Store	

Output	Independent Boning Room to Value Added
Output	Independent Boning Room to Export

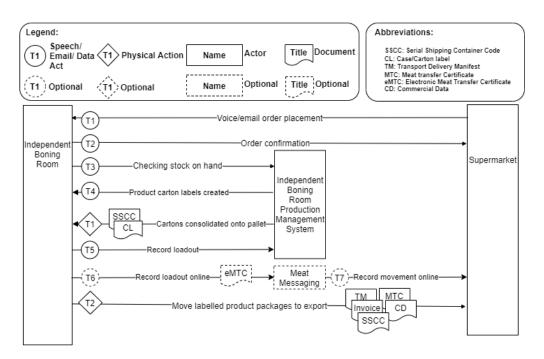
5.2.3.1.7.1 Cold Store (carcase) to Independent Boning Room



Cold Store (carcase) to Independent Boning Room

Figure 93. Data or information flows from the cold store (carton) loadout to Independent Boning Room in the beef supply chain.

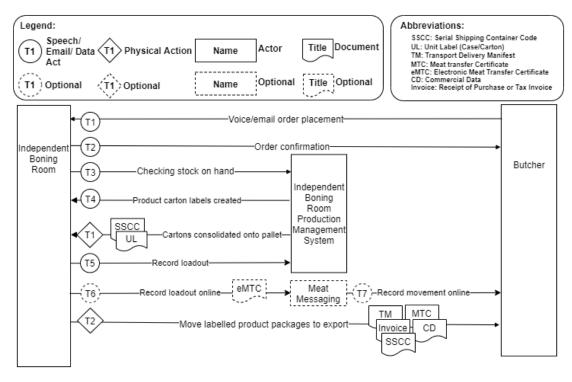
5.2.3.1.7.2 Independent Boning Room to Supermarket



Independent Boning Room to Supermarket

Figure 94. Data or information flows from the Independent Boning Room to Supermarket in the beef supply chain.

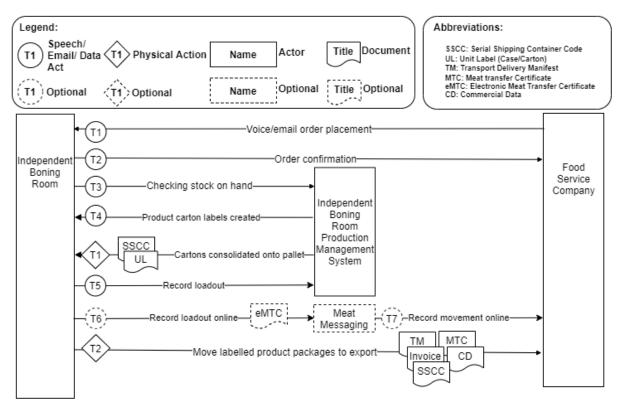




Independent Boning Room to Butcher

Figure 95. Data or information flows from the Independent Boning Room to Butcher in the beef supply chain.

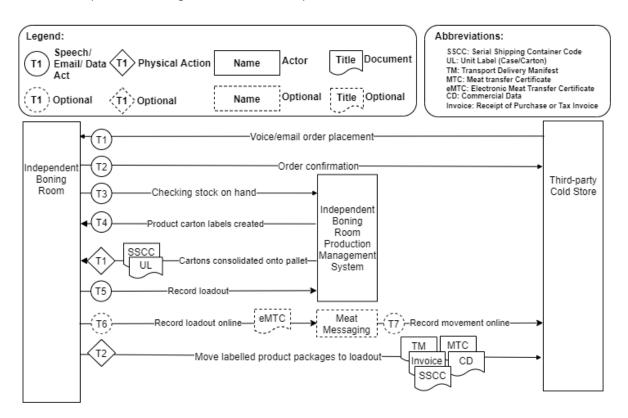
5.2.3.1.7.4 Independent Boning Room to Food Service



Independent Boning Room to Food Service

Figure 96. Data or information flows from Independent Boning Room to Food Service in the beef supply chain.

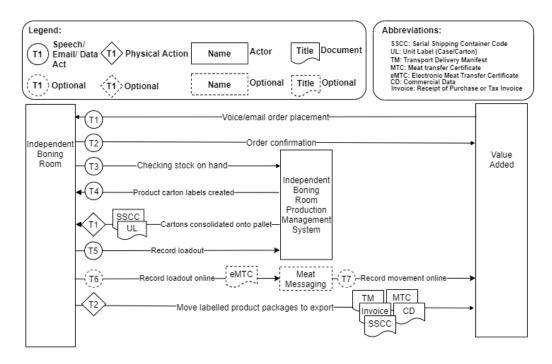
5.2.3.1.7.5 Independent Boning Room to Third-Party Cold Store



Independent Boning Room to Third Party Cold Store

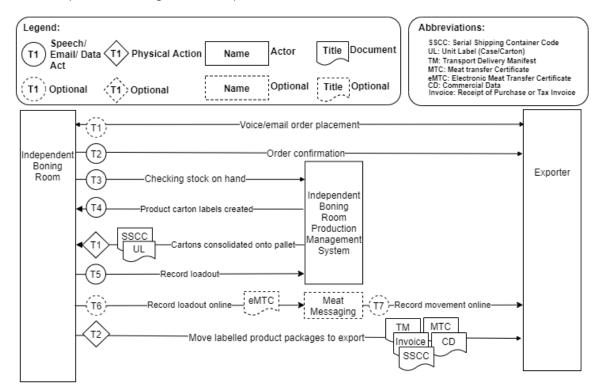
Figure 97. Data or information flows from Independent Boning Room to Third Party Cold Store in the beef supply chain.

5.2.3.1.7.6 Independent Boning Room to Value Added



Independent Boning Room to Value Added

Figure 98. Data or information flows from the Independent Boning Room to Value Added in the beef supply chain.



5.2.3.1.7.7 Independent Boning Room to Export

Independent Boning Room to Export

Figure 99. Data or information flows from the Independent Boning Room to Export System in the beef supply chain.

5.2.3.2 Value-added

Value-adding includes any process or service in the supply chain that adds to or enhances the value of products to consumers and typically the profitability of raw meat products. This may be simply providing a new variety of cuts, changing the presentation of products, or adding additional ingredients to create new products or enhance the profitability of raw products. Value-adding may also include the processing of offal and raw products for sale. Typically, value adders receive carcase or cartoned product from processor cold stores, or from independent boning rooms or third-party cold store facilities via refrigerated transport.

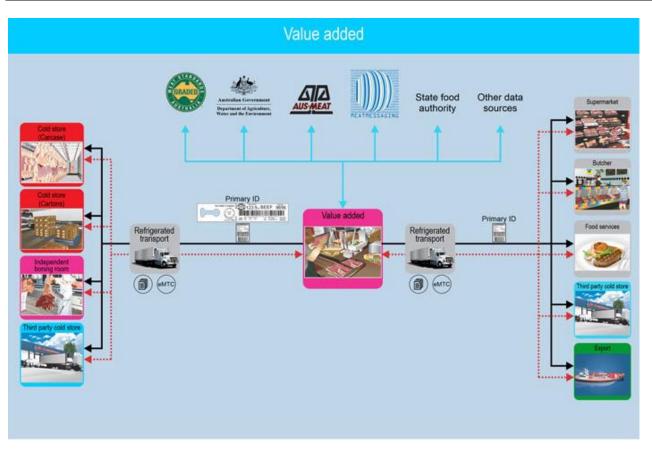


Figure 100. Inputs and outputs of the beef supply chain Value Added Sector.

5.2.3.2.1 Physical Inputs including Critical Tracking Events (CTEs)

Inputs into the value-added system include raw beef products such as carcasses, carton, and palletised items. Where additional ingredients are added to the product such as those used for marinade, these are also inputs to the system. Documentation associated with the movement of product into the value-added system may include Delivery Dockets, MTCs, Receipt of purchase/Tax Invoice etc.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with inputs to the value-added system include the receival of:

- * Carcase
- * Carton
- * Pallet
- * Product additives.

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Carcase	The body of a slaughtered animal after bleeding. Becomes a dressed carcase when hide, head, feet and offal are removed.	Carcase Ticket, Delivery Docket/Manifest, Meat Transfer Certificate (MTC), MSA Carcase Ticket, Value Added production management system, Receipt of purchase/Tax Invoice	

 Table 85. Physical inputs and associated Critical Tracking Event related documents for a beef value-added system.

Carton	This is a case, crate, or barrel of	Carton label, Delivery Docket/Manifest, Meat	
	product.	Transfer Certificate (MTC), Official seal, Value	
		Added production management system, Receipt	
		of purchase/Tax Invoice	
Pallet	A logistic unit which includes a	Delivery Docket/Manifest, Meat Transfer	
	number of cartons or goods items	Certificate (MTC), Value Added production	
	packed together for transport or	management system, Receipt of purchase/Tax	
	storage purposes.	Invoice, SSCC/Pallet label	
Product	These are ingredients or additives	Receipt of purchase/Tax Invoice, Value Added	
additives	used to enhance the value of raw	production management system	
	beef product.		

5.2.3.2.2 Information Inputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). Key Data Elements drawn from Critical Tracking Event documentation range from carcass body numbers to delivery docket numbers to application identifiers included in the GS1 barcode on the carton or pallet label. All of this information is recorded in the value adder's production management system for product traceability purposes.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Body number	This is a number assigned to each carcase by the processor for identification purposes.	Yes	Carcase Ticket, Value Added production management system	
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Carton label, Receipt of purchase/Tax Invoice, SSCC/Pallet label, Value Added production management system	
Consignment Serial Shipping Container Code (SSCC)	Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., shipment/message that is assigned by the establishment constructing the unit. The SSCC remains the same for the life of the logistic unit.	Yes	Meat Transfer Certificate (MTC), SSCC/Pallet label, Value Added production management system	For more information visit the GS1 website.
Contract number	This is a unique number allocated to the contract by the seller.	Yes	Delivery Docket/Manifest, Value Added production management system	
Count of Trade Items	Usually encoded in the GS1 barcode, this is the number of trade items e.g., cartons in the logistic unit.	Yes	Delivery Docket/Manifest, SSCC/Pallet label, Value Added production management system	For more information visit the GS1 website.
Date	This is the date of signing or of which a record entry or transaction was made.	Yes	Delivery Docket/Manifest, Meat Transfer Certificate	

Table 86. Information inputs, Key Data Elements and Critical Tracking Event related documentation for a beef value-added system.

			(MTC), Receipt of purchase/Tax Invoice,	
			Value Added production management system	
Delivery Docket/Manifest number	This is a unique number allocated to the docket for identification purposes.	Yes	Delivery Docket/Manifest, Value Added production management system	
From Establishment number	A number issued by Federal and State Authorities to identify the originating site from which meat or meat products were distributed to domestic or export markets. For transfer certificates, the Establishment numbers for both the dispatching and receiving establishments are recorded.	Yes	Carcase Ticket, Carton label, Delivery Docket/Manifest, Meat Transfer Certificate (MTC), SSCC/Pallet label, Value Added production management system	
Global Trade Item Number (GTIN)	Encoded in the GS1 barcode, the GTIN is a globally unique 14-digit number used to identify trade items, products, or services.	Yes	Carcase Ticket, Carton label, SSCC/Pallet label, Value Added production management system	For more information visit the GS1 website.
GTIN of Contained Trade Items	Encoded in the GS1 barcode, the GTIN of the contained trade items is a globally unique 14-digit number used to identify trade items, products, or services in the logistic unit.	Yes	SSCC/Pallet label, Value Added production management system	For more information visit the GS1 website.
Lot number	A lot is a number assigned by the processor to each group of cattle consigned to slaughter and is usually vendor specific.	Yes	Carcase Ticket, Value Added production management system	
Movement date	The date on which livestock or other products (e.g., feed or meat products) were transported between PICs/establishments.	Yes	Delivery Docket/Manifest, Meat Transfer Certificate (MTC), Value Added production management system	
MSA eating quality group/grade	This identifies carcases with similar MSA and eating quality grades, these may align with brands packed by the processor for logistic simplicity. Carcases are grouped for boning according to eating quality grades.	Yes	MSA Carcase Ticket, Value Added production management system	For more information on MSA visit the MLA website.
MSA Licence Number	Any establishment consigning, supplying, or identifying MSA Certified Product must be registered and have a unique MSA Licence Number.	Yes	Receipt of purchase/Tax Invoice, Value Added production management system	For more information on MSA visit the MLA website.
Net Weight (Kilograms)	Usually encoded in the GS1 barcode, the Net Weight is a variable measure of the trade item e.g.,	Yes	Carcase Ticket, Carton label, SSCC/Pallet label, Value Added production management system	For more information visit the GS1 website.

	carton, pallet or shipment recorded in kilograms.			
Official mark	Any stamp, seal, label, or mark that is declared by the regulations to be an official mark. An official mark signifies that the product has been inspected by and approved as safe for human consumption by an Authorised Officer.	Yes	Carcase Ticket, Carton label, SSCC/Pallet label, Value Added production management system	For more information visit the Australian Government Federal Register of Legislation.
Order date	This is the date on which the purchase order or contract was raised by the buyer.	Yes	Delivery Docket/Manifest, Value Added production management system	
Packaging Date	Encoded in the GS1 barcode, the Packaging Date is the date on which the item was packaged and is recorded in the format year, month, day (YYMMDD).	Yes	Carton label, SSCC/Pallet label, Value Added production management system	For more information visit the GS1 website.
Packaging Date Range	This includes the oldest and newest packaging dates for the logistic unit.	Yes	SSCC/Pallet label, Value Added production management system	
Pallet Serial Shipping Container Code (SSCC)	Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., pallet that is assigned by the establishment constructing the unit. The SSCC remains the same for the life of the logistic unit.	Yes	Meat Transfer Certificate (MTC), SSCC/Pallet label, Value Added production management system	For more information visit the GS1 website.
Production Date (YYMMDD)	Encoded in the GS1 barcode, this is the 'kill' or slaughter' date of the product and is recorded in the format year, month, day (YYMMDD).	Yes	Carcase Ticket, Meat Transfer Certificate (MTC), Value Added production management system	For more information visit the GS1 website.
Recipient Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Receipt of purchase/Tax Invoice, Value Added production management system	For more information visit the ATO website.
Seal Serial Number	This is a unique serial number printed on any tamper-evident seal issued by the Department.	Yes	Meat Transfer Certificate (MTC), Official seal, Value Added production management system	For more information visit the Australian Government Federal Register of Legislation.
Seller/Supplier Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Receipt of purchase/Tax Invoice, Value Added production management system	For more information visit the ATO website.
Serial Number	Encoded in the GS1 barcode, this is a code, numeric or alphanumeric, assigned to an individual instance of an item for its lifetime.	Yes	Carcase Ticket, Carton label, Value Added production management system	For more information visit the GS1 website.
Shipping Mark	Also known as a port mark, this is a code comprising of three letters representing the foreign	Yes	Delivery Docket/Manifest, SSCC/Pallet label, Value	

	establishment number and the last		Added production	
	nine digits of the consignment SSCC.		management system	
To Establishment	A number issued by Federal and	Yes	Meat Transfer Certificate	
number	State Authorities to identify the		(MTC), Value Added	
	originating site from which meat or		production management	
	meat products were distributed to		system	
	domestic or export markets. For			
	transfer certificates, the			
	Establishment numbers for both the			
	dispatching and receiving			
	establishments are recorded.			
Trade description	This is a collective set of words that	Yes	Carcase Ticket, Carton	
	says what the product is and may		label, Delivery	
	include information such as species,		Docket/Manifest, Meat	
	net weight of product, name and		Transfer Certificate	
	address of establishments, category		(MTC), SSCC/Pallet label,	
	ciphers, market endorsements, MSA		Value Added production	
	eating quality etc.		management system	
Transfer Certificate	A unique certificate number issued	Yes	Meat Transfer Certificate	
number	for traceability purposes.		(MTC), Value Added	
			production management	
			system	
Transport	The registration number of the	Yes	Delivery	
registration number	vehicle in which the animals or		Docket/Manifest, Meat	
-	product were transported. For		Transfer Certificate	
	shipments of product this will be a		(MTC), Value Added	
	shipping container number.		production management	
			system	

5.2.3.2.3 Physical Outputs including Critical Tracking Events (CTEs)

The outputs of the value-added system include altered meat product, with increased value, that is packaged into cartons, pallets, or shipping containers for distribution. Additional documentation required for the movement of product for export may include a Bill of lading/Air Waybill, Export Health Certificate, Export Permit and Certificate of Analysis.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with the outputs of the value-added system include the movement of:

- * Carton
- * Pallet
- * Container System Unit

off the property, premises, or supply chain sector.

Table 87. Physical outputs and associated Critical Tracking Event related documents for a beef value-adding system.

Description of the inputs		More details
---------------------------	--	-----------------

Carton	This is a case, crate, or	Carton label, Delivery Docket/Manifest, Meat Transfer	
	barrel of product.	Certificate (MTC), Official seal, Value Added production	
		management system, Receipt of purchase/Tax Invoice	
Pallet	A logistic unit which	Bill of lading/Air Waybill, Delivery Docket/Manifest,	
	includes a number of	Export Health Certificate, Export Permit, Meat Transfer	
	cartons or goods items	Certificate (MTC), Value Added production management	
	packed together for	system, Receipt of purchase/Tax Invoice, SSCC/Pallet	
	transport or storage	label, Certificate of Analysis (COA)	
	purposes.		
Container	A container designed for	Bill of lading/Air Waybill, Delivery Docket/Manifest,	
System Unit	use as a unit of cargo	Export Health Certificate, Export Permit, Meat	
	handling equipment in the	Messaging Consignment Report, Meat Transfer	
	transport of goods by	Certificate (MTC), Official seal, Value Added production	
	aircraft or ship.	management system, Receipt of purchase/Tax Invoice,	
		Certificate of Analysis (COA)	

5.2.3.2.4 Information Outputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). Key Data Elements from value added Critical Tracking Event related documentation will be stored in the value adder's production management system. Such information may include, but not be limited to, GS1 barcode application identifiers, movement dates, product net weight, seal serial numbers and transfer certificate numbers.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Analysis Date	This is the date on which a product sample was analysed.	Yes	Certificate of Analysis (COA), Value Added production management system	
Bill of lading/Air Waybill document number	A unique document number issued for traceability purposes.	Yes	Bill of lading/Air Waybill, Certificate of Analysis (COA), Value Added production management system	
Certificate of Analysis number	A unique certificate number issued for traceability purposes.	Yes	Certificate of Analysis (COA), Value Added production management system	
COA test lot identifier	This is a unique identifier allocated to all cartons, pallets, and shipping containers for which an analysis sample represents.	Yes	Certificate of Analysis (COA), Value Added production management system	
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Bill of lading/Air Waybill, Carton label, Certificate of Analysis (COA), Receipt of purchase/Tax Invoice, SSCC/Pallet label, Value	

Table 88. Information outputs, Key Data Elements and Critical Tracking Event related documentation for a beef value-added system.

	1	1		
			Added production	
			management system	_
Consignment Serial	Encoded in the GS1 barcode, this	Yes	Bill of lading/Air Waybill,	For more information visit
Shipping Container	is a unique number which		Meat Messaging	the GS1
Code (SSCC)	identifies the individual logistic		Consignment Report, Meat	website.
	unit i.e., shipment/message that		Transfer Certificate (MTC),	
	is assigned by the establishment		SSCC/Pallet label, Value	
	constructing the unit. The SSCC		Added production	
	remains the same for the life of		management system	
	the logistic unit.			
Contract number	This is a unique number allocated	Yes	Delivery Docket/Manifest,	
	to the contract by the seller.		Value Added production	
			management system	
Count of Pallets	This is the number of pallets in	Yes	Meat Messaging	
Count of Fallets	-	163	Consignment Report, Value	
	the logistic unit e.g., container		3 1 1	
	system unit.		Added production	
0 · (T ·			management system	Formoro
Count of Trade	Usually encoded in the GS1	Yes	Bill of lading/Air Waybill,	For more information visit
Items	barcode, this is the number of		Delivery Docket/Manifest,	the GS1
	trade items e.g., cartons in the		Meat Messaging	website.
	logistic unit.		Consignment Report,	
			SSCC/Pallet label, Value	
			Added production	
			management system	
Date	This is the date of signing or of	Yes	Bill of lading/Air Waybill,	
	which a record entry or		Certificate of Analysis	
	transaction was made.		(COA), Delivery	
			Docket/Manifest, Meat	
			Messaging Consignment	
			Report, Meat Transfer	
			Certificate (MTC), Receipt of	
			purchase/Tax Invoice, Value	
			Added production	
			management system	
Delivery	This is a unique number allocated	Yes	Delivery Docket/Manifest,	
Docket/Manifest	to the docket for identification	103	Value Added production	
number			management system	
	purposes.	Vaa		For more
Export Health	A unique number allocated to the	Yes	Export Health Certificate,	information visit
Certificate Number	health certificate issued for the		Meat Messaging	the Department
	export consignment for		Consignment Report, Value	of Agriculture,
	traceability purposes.		Added production	Water and the Environment
			management system	website.
Export Permit	A unique permit number is	Yes	Export Permit, Value Added	For more
Number	allocated for the export		production management	information visit
	consignment following		system	the Department
	submission of a correct and			of Agriculture, Water and the
	validated Request For Permit			Environment
	(RFP) which is then approved by			website.
	the Secretary.			
From Establishment	A number issued by Federal and	Yes	Carton label, Certificate of	
number	State Authorities to identify the	162	Analysis (COA), Delivery	
number	-			
	originating site from which meat		Docket/Manifest, Export	
	or meat products were		Health Certificate, Meat	

		1		,
	distributed to domestic or export		Messaging Consignment	
	markets. For transfer certificates,		Report, Meat Transfer	
	the Establishment numbers for		Certificate (MTC),	
	both the dispatching and		SSCC/Pallet label, Value	
	receiving establishments are		Added production	
	recorded.		management system	
Global Trade Item	Encoded in the GS1 barcode, the	Yes	Carton label, Meat	For more
Number (GTIN)	GTIN is a globally unique 14-digit		Messaging Consignment	information visit the GS1
	number used to identify trade		Report, SSCC/Pallet label,	website.
	items, products, or services.		Value Added production	
			management system	
GTIN of Contained	Encoded in the GS1 barcode, the	Yes	SSCC/Pallet label, Value	For more
Trade Items	GTIN of the contained trade items		Added production	information visit
	is a globally unique 14-digit		management system	the GS1 website.
	number used to identify trade			website.
	items, products, or services in the			
	logistic unit.			
Movement date	The date on which livestock or	Yes	Bill of lading/Air Waybill,	
Wovement date	other products (e.g., feed or meat	105	Certificate of Analysis	
	products) were transported		(COA), Delivery	
	between PICs/establishments.		Docket/Manifest, Export	
	between rics/establishments.		Health Certificate, Meat	
			Transfer Certificate (MTC),	
			Value Added production	
			management system	
MSA Licence	Any establishment consigning,	Yes	Receipt of purchase/Tax	For more
Number	supplying, or identifying MSA	res	Invoice, Value Added	information on
Number	Certified Product must be			MSA visit the
			production management	MLA website.
	registered and have a unique MSA Licence Number.		system	
NotMoiabt	Usually encoded in the GS1	Vaa	Dill of loding (Ain Moubill	For more
Net Weight (Kilograms)	barcode, the Net Weight is a	Yes	Bill of lading/Air Waybill, Carton label, Export Health	information visit
(KIIOgrafiis)	variable measure of the trade		Certificate, Meat Messaging	the GS1
				website.
	item e.g., carton, pallet or		Consignment Report,	
	shipment recorded in kilograms.		SSCC/Pallet label, Value	
			Added production	
		Max	management system	For more
Official mark	Any stamp, seal, label, or mark	Yes	Carton label, SSCC/Pallet	information visit
	that is declared by the regulations		label, Value Added	the Australian
	to be an official mark. An official		production management	Government
	mark signifies that the product		system	Federal Register of Legislation.
	has been inspected by and			or Legislation.
	approved as safe for human			
	consumption by an Authorised			
	Officer.			
Order date	This is the date on which the	Yes	Delivery Docket/Manifest,	
	purchase order or contract was		Value Added production	
	raised by the buyer.		management system	
Packaging Date	Encoded in the GS1 barcode, the	Yes	Carton label, Certificate of	For more information visit
	Packaging Date is the date on		Analysis (COA), SSCC/Pallet	the GS1
	which the item was packaged and		label, Value Added	website.
	is recorded in the format year,		production management	
	month, day (YYMMDD).	1	system	

Dackaging Data	This includes the oldest and	Voc	SSCC/Pallet label Value	
Packaging Date		Yes	SSCC/Pallet label, Value	
Range	newest packaging dates for the		Added production	
	logistic unit.	N/	management system	For more
Pallet Serial	Encoded in the GS1 barcode, this	Yes	Meat Messaging	information visit
Shipping Container	is a unique number which		Consignment Report, Meat	the GS1
Code (SSCC)	identifies the individual logistic		Transfer Certificate (MTC),	website.
	unit i.e., pallet that is assigned by		SSCC/Pallet label, Value	
	the establishment constructing		Added production	
	the unit. The SSCC remains the		management system	
	same for the life of the logistic			
	unit.			
Production Date	Encoded in the GS1 barcode, this	Yes	Meat Transfer Certificate	For more
(YYMMDD)	is the 'kill' or slaughter' date of		(MTC), Value Added	information visit the GS1
	the product and is recorded in the		production management	website.
	format year, month, day		system	
	(YYMMDD).			
Recipient	This is an 11-digit registration	Yes	Receipt of purchase/Tax	For more
Australian Business	number, issued by the Australian		Invoice, Value Added	information visit
Number (ABN)	Tax Office, used to identify		production management	the ATO website.
X ···/	businesses.		system	WODDIG.
Seal Serial Number	This is a unique serial number	Yes	Bill of lading/Air Waybill,	For more
	printed on any tamper-evident		Meat Transfer Certificate	information visit
	seal issued by the Department.		(MTC), Official seal, Value	the GS1
	sear issued by the Department.		Added production	website.
			management system	
Seller/Supplier	This is an 11-digit registration	Yes	Receipt of purchase/Tax	For more
Australian Business	number, issued by the Australian	163	Invoice, Value Added	information visit
Number (ABN)	Tax Office, used to identify		production management	the ATO
Nulliber (ADN)	businesses.			website.
Serial Number		Vac	system	For more
Serial Number	Encoded in the GS1 barcode, this	Yes	Carton label, Value Added	information visit
	is a code, numeric or		production management	the GS1
	alphanumeric, assigned to an		system	website.
	individual instance of an item for			
China Mark	its lifetime.	Vaa	Dill of loding (Air) (Av shill	
Shipping Mark	Also known as a port mark, this is	Yes	Bill of lading/Air Waybill,	
	a code comprising of three letters		Certificate of Analysis	
	representing the foreign		(COA), Delivery	
	establishment number and the		Docket/Manifest, Export	
	last nine digits of the		Health Certificate, Meat	
	consignment SSCC.		Messaging Consignment	
			Report, SSCC/Pallet label,	
			Value Added production	
			management system	
To Establishment	A number issued by Federal and	Yes	Meat Transfer Certificate	
number	State Authorities to identify the		(MTC), Value Added	
	originating site from which meat		production management	
	or meat products were		system	
	distributed to domestic or export			
	markets. For transfer certificates,			
	the Establishment numbers for			
	both the dispatching and			
	receiving establishments are			
	recorded.			
		1	1	I

Trade description	This is a collective set of words that says what the product is and may include information such as species, net weight of product, name and address of establishments, category ciphers, market endorsements, MSA eating quality etc.	Yes	Carton label, Delivery Docket/Manifest, Export Health Certificate, Meat Messaging Consignment Report, Meat Transfer Certificate (MTC), SSCC/Pallet label, Value Added production management system	
Transfer Certificate number	A unique certificate number issued for traceability purposes.	Yes	Meat Messaging Consignment Report, Meat Transfer Certificate (MTC), Value Added production management system	
Transport registration number	The registration number of the vehicle in which the animals or product were transported. For shipments of product this will be a shipping container number.	Yes	Bill of lading/Air Waybill, Delivery Docket/Manifest, Export Health Certificate, Meat Messaging Consignment Report, Meat Transfer Certificate (MTC), Value Added production management system	

5.2.3.2.5 Regulatory and Industry Programs

- * Meat Standards Australia (MSA)
- * AUS-MEAT
- * Australian Meat Industry Council (AMIC)
- * Department of Agriculture
- * Meat Messaging
- * Other data sources
- * State food authority

5.2.3.2.6 Supply Chain Node Traceability

For Value Added operations the ability to trace product forward and track product backwards is defined by food safety regulations. In practice, this means that any prepared meat retail-ready or food service products are managed as a batch (with unique serialised carton labels or retail-ready product labels) with the inputs to the batch being all the carcase or carton identification units (carcase tickets/carton labels) that went into the batch. Should a recall occur related to any of the input material the whole value-added batch(s) would be recalled.

Tracing a single meat retail-ready or food service product (e.g., a portion prepared steak) back to a single animal or source property is operationally impractical. The example below shows the complexity of such a trace back.

Retail ready product traceability example:

1. The volume of retail-ready or food service product made in a batch would likely be in the order of 1 000 kg (50 x 20 kg primal cut cartons) which equates to 100 x 10 kg of finished retail-ready/food service cartons or approximately 5 000 x 200 g portioned steaks. This is managed as a production batch and as such, any one steak in any carton may have come from any of the 50 x 20 kg primal cut cartons.

The cartons from which this retail-ready product (50 x 20 kg cartons) was produced may have been comprised of 1 000 kg of cube roll primal cut cartons. These cartons might typically be sourced from 2 processing establishments and over 3 production days for each processing establishment, this is a total of 6 plant kill days.
 The average weight of the cube rolls in each carton is 3.3 kg. This means that each carton has 6 cube rolls. With

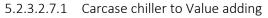
each carcase having 2 cube rolls, the 50 cartons may have been produced from 150 head of cattle.
4. Each processing plant might kill 500 head per day, and these might come from an average of 20 source properties. The traceability of cartoned boning room product is limited to the carcases that have entered the boning room for the production run of cartons that are created. This means that the primal cut e.g., cube roll in any carton may have come from any of the 500 carcases for that boning run production day.
5. As the cube roll primal cut cartons came from a total of 6 plant kill day combinations, this equates to any primal cut coming from any one of a possible 3 000 head of cattle or 120 possible source properties.

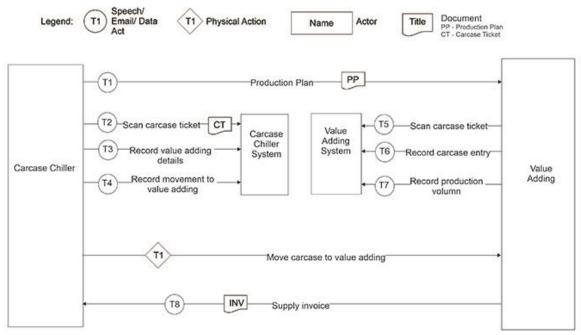
In summary, for this example, any individual 200 g portion cut steak may have come from any one of 3 000 head of cattle from any one of 120 source properties. It is possible in some very small scale and very high value commercial operations to manage single body boning and tracking the cuts to retail-ready packaging. However, this would represent less than a fraction of a percent of the total meat industry production volume.

5.2.3.2.7 Data flow diagrams

Direction	Description
Input	Carcase chiller to Value added
Input	Carton chiller/ freezer to Value added
Output	Value added to Supermarket
Output	Value added to Butcher
Output	Value added to Food services
Output	Value added to Third party cold store
Output	Value added to Value added
Output	Value added to export

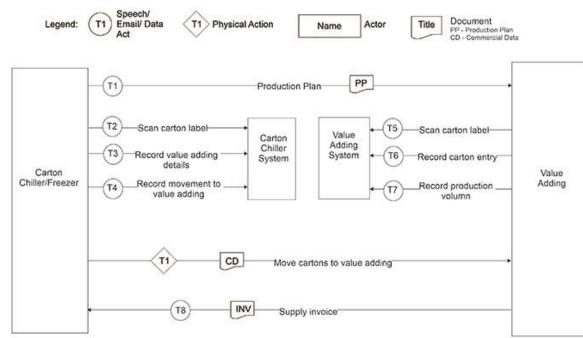
Table 80 Data flow diagrams	for the inputs and outputs	of a beef value-added system.
Tuble 69. Dutu jiow uluyrunis j	jor the inputs and outputs	oj u beej vulue-uuueu system.





Carcase Chiller to Value Adding

Figure 101. Data or information flows from the carcase chiller to value-added systems in the beef supply chain.

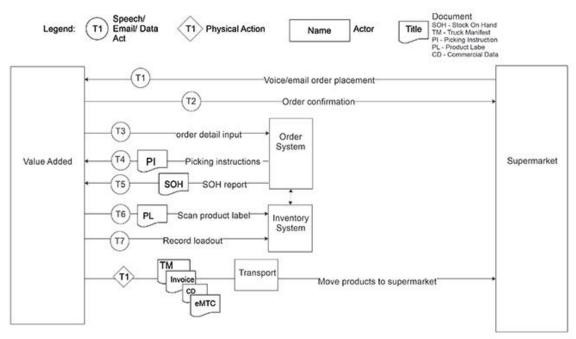


5.2.3.2.7.2 Carton chiller/ freezer to Value adding

Carton Chiller/Freezer to Value Adding

Figure 102. Data or information flows from the carton chiller/freezer to value-added systems in the beef supply chain.

5.2.3.2.7.3 Value added to Supermarket



Value Added to Supermarket

Figure 103. Data or information flows from the value-added to supermarket systems in the beef supply chain.

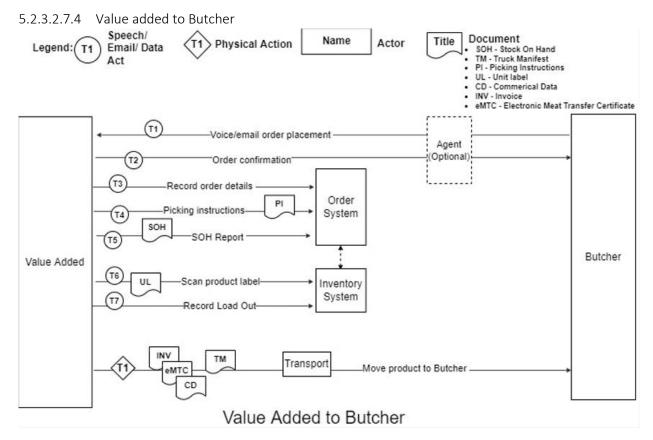
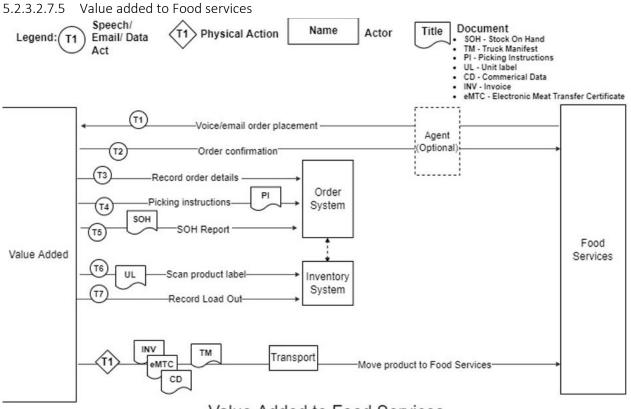


Figure 104. Data or information flows from the value-added to butcher systems in the beef supply chain.



Value Added to Food Services

Figure 105. Data or information flows from the value-added to food services systems in the beef supply chain.

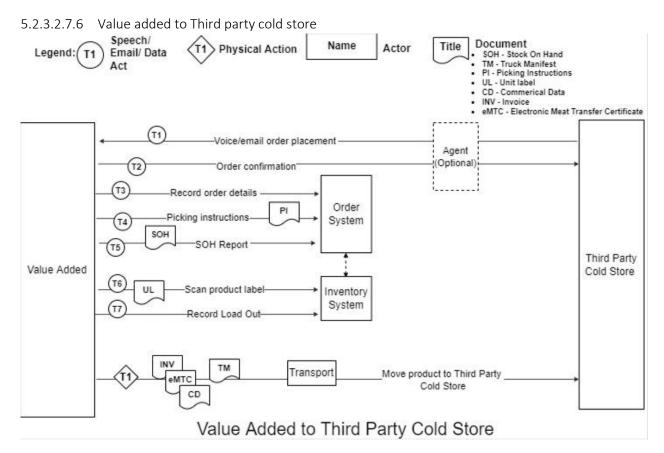
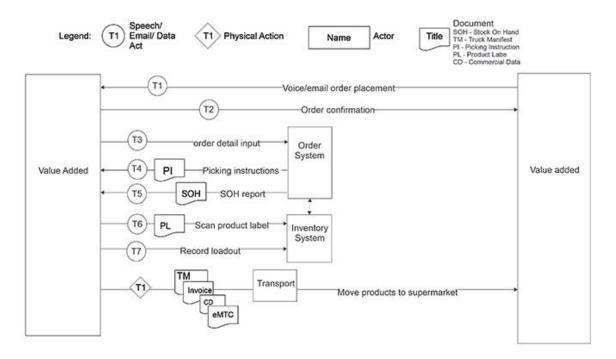


Figure 106. Data or information flows from the value-added to third party cold store systems in the beef supply chain.

5.2.3.2.7.7 Value added to Value added



Value Added to Value added

Figure 107. Data or information flows from the value-added to value-added systems in the beef supply chain.

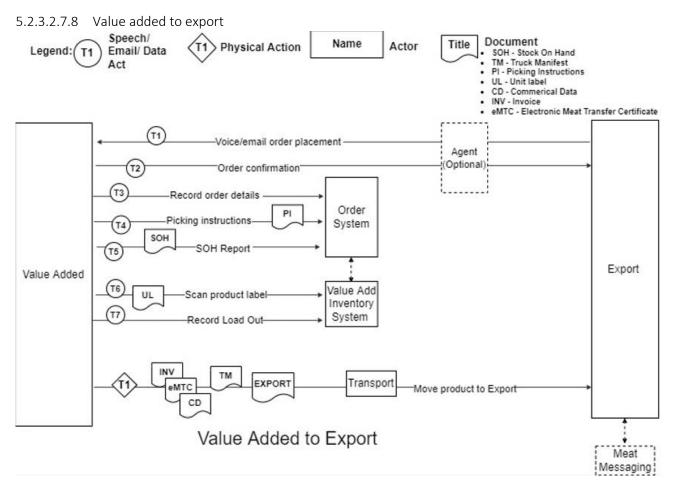


Figure 108. Data or information flows from the value-added to value-added systems in the beef supply chain.

5.2.3.3 Third party cold store

Storing chilled carcases or carcase products (e.g., cartons) typically provides a stock buffer between production and dispatch of product intended for domestic or export markets. A third-party cold storage system is an establishment, separate from a processing establishment, which performs activities the same as that for a cold storage facility integrated into a processing plant. However, product from multiple suppliers may be stored and/combined for dispatch. A cold storage facility involves refrigerated chambers that can chill or freeze any perishable product for a period of time before dispatch. During this process, the ageing of meat also occurs, progressively increasing tenderness and flavour. Storage rooms must take into account the storage requirements for different products as well as rules for loading, maintenance and hygiene of storage equipment.

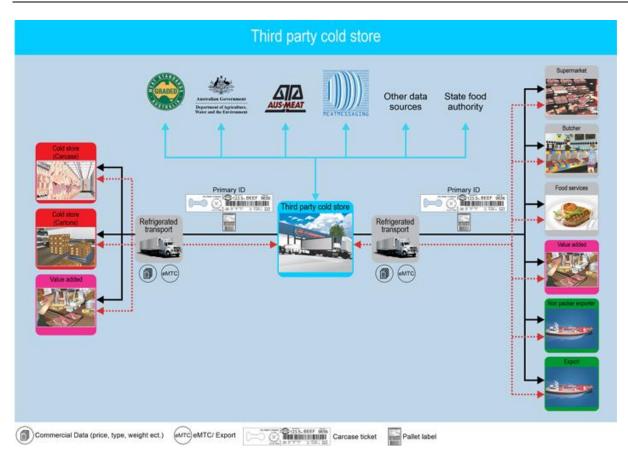


Figure 109. Inputs and outputs of the beef supply chain third party cold store sector.

5.2.3.3.1 Physical Inputs including Critical Tracking Events (CTEs)

Cold stores generally offer their clients a range of services involving stock rotation, logistics, maintenance, and systems of identification. Product moved into cold stores ranges from carcasses to pallets of product. These are accompanied by documentation such as Meat Transfer Certificates and Delivery Dockets.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with inputs to the third-party cold store system include the receival of:

- * Carcase
- * Carton
- * Pallet.

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Carcase	The body of a slaughtered animal after bleeding. Becomes a dressed carcase when hide, head, feet and offal are removed.	Carcase Ticket, Delivery Docket/Manifest, Meat Transfer Certificate (MTC), MSA Carcase Ticket, Third Party Cold Store production management system, Receipt of purchase/Tax Invoice	

 Table 90. Physical inputs and associated Critical Tracking Event related documents for a beef third party cold store system.

Carton	This is a case, crate, or barrel of product.	Carton label, Delivery Docket/Manifest, Meat Transfer Certificate (MTC), Official seal, Third Party Cold Store production management system, Receipt of purchase/Tax Invoice	
Pallet	A logistic unit which includes a number of cartons or goods items packed together for transport or storage purposes.	Delivery Docket/Manifest, Meat Transfer Certificate (MTC), Third Party Cold Store production management system, Receipt of purchase/Tax Invoice, SSCC/Pallet label	

5.2.3.3.2 Information Inputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). Key Data Elements found on CTE documentation accompanying the movement of product into cold stores ranges from carcase body numbers (found on the Carcase Ticket) to establishment numbers, official marks, and seal serial numbers.

Table 91. Information inputs, Key Data Elements and Critical Tracking Event related documentation for a beef third party cold store system.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Body number	This is a number assigned to each carcase by the processor for identification purposes.	Yes	Carcase Ticket, Third Party Cold Store production management system	
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Carton label, Receipt of purchase/Tax Invoice, SSCC/Pallet label, Third Party Cold Store production management system	
Consignment Serial Shipping Container Code (SSCC)	Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., shipment/message that is assigned by the establishment constructing the unit. The SSCC remains the same for the life of the logistic unit.	Yes	Meat Transfer Certificate (MTC), SSCC/Pallet label, Third Party Cold Store production management system	
Contract number	This is a unique number allocated to the contract by the seller.	Yes	Delivery Docket/Manifest	
Count of Trade Items	Usually encoded in the GS1 barcode, this is the number of	Yes	Delivery Docket/Manifest, SSCC/Pallet label, Third	For more information visit

	trade items e.g., cartons in the logistic unit.		Party Cold Store production management system	<u>the GS1</u> <u>website.</u>
Date	This is the date of signing or of which a record entry or transaction was made.	Yes	Delivery Docket/Manifest, Meat Transfer Certificate (MTC), Receipt of purchase/Tax Invoice, Third Party Cold Store production management system	
Delivery Docket/Manifest number	This is a unique number allocated to the docket for identification purposes.	Yes	Delivery Docket/Manifest, Third Party Cold Store production management system	
From Establishment number	A number issued by Federal and State Authorities to identify the originating site from which meat or meat products were distributed to domestic or export markets. For transfer certificates, the Establishment numbers for both the dispatching and receiving establishments are recorded.	Yes	Carcase Ticket, Carton label, Delivery Docket/Manifest, Meat Transfer Certificate (MTC), SSCC/Pallet label, Third Party Cold Store production management system	
Global Trade Item Number (GTIN)	Encoded in the GS1 barcode, the GTIN is a globally unique 14-digit number used to identify trade items, products, or services.	Yes	Carcase Ticket, Carton label, SSCC/Pallet label, Third Party Cold Store production management system	For more information visit the GS1 website.
GTIN of Contained Trade Items	Encoded in the GS1 barcode, the GTIN of the contained trade items is a globally unique 14-digit number used to identify trade items, products, or services in the logistic unit.	Yes	SSCC/Pallet label, Third Party Cold Store production management system	For more information visit the GS1 website.
Lot number	A lot is a number assigned by the processor to each group of cattle consigned to slaughter and is usually vendor specific.	Yes	Carcase Ticket, Third Party Cold Store production management system	
Movement date	The date on which livestock or other products (e.g., feed or meat products) were transported between PICs/establishments.	Yes	Delivery Docket/Manifest, Meat Transfer Certificate (MTC), Third Party Cold	

			Store production management system	
MSA eating quality group/grade	This identifies carcases with similar MSA and eating quality grades, these may align with brands packed by the processor for logistic simplicity. Carcases are grouped for boning according to eating quality grades.	Yes	MSA Carcase Ticket, Third Party Cold Store production management system	For more information on MSA visit the MLA website.
MSA Licence Number	Any establishment consigning, supplying, or identifying MSA Certified Product must be registered and have a unique MSA Licence Number.	Yes	Receipt of purchase/Tax Invoice, Third Party Cold Store production management system	For more information on MSA visit the MLA website.
Net Weight (Kilograms)	Usually encoded in the GS1 barcode, the Net Weight is a variable measure of the trade item e.g., carton, pallet or shipment recorded in kilograms.	Yes	Carcase Ticket, Carton label, SSCC/Pallet label, Third Party Cold Store production management system	For more information visit the GS1 website.
Official mark	Any stamp, seal, label, or mark that is declared by the regulations to be an official mark. An official mark signifies that the product has been inspected by and approved as safe for human consumption by an Authorised Officer.	Yes	Carcase Ticket, Carton label, SSCC/Pallet label, Third Party Cold Store production management system	For more information visit the Australian Government Federal Register of Legislation.
Order date	This is the date on which the purchase order or contract was raised by the buyer.	Yes	Delivery Docket/Manifest, Third Party Cold Store production management system	
Packaging Date	Encoded in the GS1 barcode, the Packaging Date is the date on which the item was packaged and is recorded in the format year, month, day (YYMMDD).	Yes	Carton label, SSCC/Pallet label, Third Party Cold Store production management system	For more information visit the GS1 website.
Packaging Date Range	This includes the oldest and newest packaging dates for the logistic unit.	Yes	SSCC/Pallet label, Third Party Cold Store production management system	

Pallet Serial Shipping Container Code (SSCC)	Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., pallet that is assigned by the establishment constructing the unit. The SSCC remains the same for the life of the logistic unit.	Yes	Meat Transfer Certificate (MTC), SSCC/Pallet label, Third Party Cold Store production management system	For more information visit the GS1 website.
Production Date (YYMMDD)	Encoded in the GS1 barcode, this is the 'kill' or slaughter' date of the product and is recorded in the format year, month, day (YYMMDD).	Yes	Carcase Ticket, Meat Transfer Certificate (MTC), Third Party Cold Store production management system	For more information visit the GS1 website.
Recipient Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Receipt of purchase/Tax Invoice, Third Party Cold Store production management system	For more information visit the ATO website.
Seal Serial Number	This is a unique serial number printed on any tamper-evident seal issued by the Department.	Yes	Meat Transfer Certificate (MTC), Official seal, Third Party Cold Store production management system	For more information visit the Australian Government Federal Register of Legislation.
Seller/Supplier Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Receipt of purchase/Tax Invoice, Third Party Cold Store production management system	For more information visit the ATO website.
Serial Number	Encoded in the GS1 barcode, this is a code, numeric or alphanumeric, assigned to an individual instance of an item for its lifetime.	Yes	Carcase Ticket, Carton label, Third Party Cold Store production management system	For more information visit the GS1 website.
Shipping Mark	Also known as a port mark, this is a code comprising of three letters representing the foreign establishment number and the last nine digits of the consignment SSCC.	Yes	Delivery Docket/Manifest, SSCC/Pallet label, Third Party Cold Store production management system	
To Establishment number	A number issued by Federal and State Authorities to identify the originating site from which meat or meat products were distributed to domestic or export markets. For transfer certificates, the Establishment numbers for both	Yes	Meat Transfer Certificate (MTC), Third Party Cold Store production management system	

	the dispatching and receiving establishments are recorded.			
Trade description	This is a collective set of words that says what the product is and may include information such as species, net weight of product, name and address of establishments, category ciphers, market endorsements, MSA eating quality etc.	Yes	Carcase Ticket, Carton label, Delivery Docket/Manifest, Meat Transfer Certificate (MTC), SSCC/Pallet label, Third Party Cold Store production management system	
Transfer Certificate number	A unique certificate number issued for traceability purposes.	Yes	Meat Transfer Certificate (MTC), Third Party Cold Store production management system	For more information visit the Department of Agriculture, Water and the Environment website.
Transport registration number	The registration number of the vehicle in which the animals or product were transported. For shipments of product this will be a shipping container number.	Yes	Delivery Docket/Manifest, Meat Transfer Certificate (MTC), Third Party Cold Store production management system	

5.2.3.3.3 Physical Outputs including Critical Tracking Events (CTEs)

Product exiting cold stores and transferred along the supply chain may include carcases to shipping containers for export product. Documentation required here includes that for both domestic and export product such as a Delivery Docket/Manifest, MTC, Bill of lading/Air Waybill, Export Permit and Export Health Certificate.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with the outputs of the third-party cold store system include the movement of:

- * Carcase
- * Carton
- * Pallet
- * Container System Unit

off the property, premises, or supply chain sector.

Table 92. Physical outputs and associated Critical Tracking Event related documents for a beef third party cold store system.

Event	Description of the inputs	Critical Tracking Event (CTE) related documents	More
related to		(including electronic)	details
the inputs			

Carcase	The body of a slaughtered animal after bleeding. Becomes a dressed carcase when hide, head, feet and offal are removed.	Carcase Ticket, Delivery Docket/Manifest, Meat Transfer Certificate (MTC), MSA Carcase Ticket, Third Party Cold Store production management system, Receipt of purchase/Tax Invoice	
Carton	This is a case, crate, or barrel of product.	Carton label, Delivery Docket/Manifest, Meat Transfer Certificate (MTC), Official seal, Third Party Cold Store production management system, Receipt of purchase/Tax Invoice	
Pallet	A logistic unit which includes a number of cartons or goods items packed together for transport or storage purposes.	Bill of lading/Air Waybill, Delivery Docket/Manifest, Export Health Certificate, Export Permit, Meat Transfer Certificate (MTC), Third Party Cold Store production management system, Receipt of purchase/Tax Invoice, Certificate of Analysis (COA), SSCC/Pallet label	
Container System Unit	A container designed for use as a unit of cargo handling equipment in the transport of goods by aircraft or ship.	Bill of lading/Air Waybill, Delivery Docket/Manifest, Export Health Certificate, Export Permit, Meat Messaging Consignment Report, Meat Transfer Certificate (MTC), Official seal, Third Party Cold Store production management system, Certificate of Analysis (COA), Receipt of purchase/Tax Invoice	

5.2.3.3.4 Information Outputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). Key Data Elements from cold store CTE related documentation will be stored in the production management system. Such information may include, but not be limited to, GS1 barcode application identifiers, movement dates, product net weight, seal serial numbers and transfer certificate numbers.

Table 93. Information outputs, Key Data Elements and Critical Tracking Event related documentation for a beef third party cold store system.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Analysis Date	This is the date on which a product sample was analysed.	Yes	Certificate of Analysis (COA), Third Party Cold Store production management system	
Bill of lading/Air Waybill document number	A unique document number issued for traceability purposes.	Yes	Bill of lading/Air Waybill, Certificate of Analysis (COA), Third Party Cold Store production management system	

Body number	This is a number assigned to each carcase by the processor for identification purposes.	Yes	Carcase Ticket, Third Party Cold Store production management system	
Certificate of Analysis number	A unique certificate number issued for traceability purposes.	Yes	Certificate of Analysis (COA), Third Party Cold Store production management system	
COA test lot identifier	This is a unique identifier allocated to all cartons, pallets, and shipping containers for which an analysis sample represents.	Yes	Certificate of Analysis (COA), Third Party Cold Store production management system	
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Bill of lading/Air Waybill, Carton label, Certificate of Analysis (COA), Receipt of purchase/Tax Invoice, SSCC/Pallet label, Third Party Cold Store production management system, Value Added production management system	
Consignment Serial Shipping Container Code (SSCC)	Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., shipment/message that is assigned by the establishment constructing the unit. The SSCC remains the same for the life of the logistic unit.	Yes	Bill of lading/Air Waybill, Meat Messaging Consignment Report, Meat Transfer Certificate (MTC), SSCC/Pallet label, Third Party Cold Store production management system	For more information visit the GS1 website.
Contract number	This is a unique number allocated to the contract by the seller.	Yes	Delivery Docket/Manifest, Third Party Cold Store production management system	
Count of Pallets	This is the number of pallets in the logistic unit e.g., container system unit.	Yes	Meat Messaging Consignment Report, Third Party Cold Store production management system	
Count of Trade Items	Usually encoded in the GS1 barcode, this is the number of trade items e.g., cartons in the logistic unit.	Yes	Bill of lading/Air Waybill, Delivery Docket/Manifest, Meat Messaging Consignment Report, SSCC/Pallet label, Third Party Cold Store production management system	For more information visit the GS1 website.

Date	This is the date of signing or of which a record entry or transaction was made.	Yes	Bill of lading/Air Waybill, Certificate of Analysis (COA), Delivery Docket/Manifest, Meat Messaging Consignment Report, Meat Transfer Certificate (MTC), Receipt of purchase/Tax Invoice, Third Party Cold Store production management system	
Delivery Docket/Manifest number	This is a unique number allocated to the docket for identification purposes.	Yes	Delivery Docket/Manifest, Third Party Cold Store production management system	
Export Health Certificate Number	A unique number allocated to the health certificate issued for the export consignment for traceability purposes.	Yes	Export Health Certificate, Meat Messaging Consignment Report, Third Party Cold Store production management system	For more information visit the Department of Agriculture, Water and the Environment website.
Export Permit Number	A unique permit number is allocated for the export consignment following submission of a correct and validated Request For Permit (RFP) which is then approved by the Secretary.	Yes	Export Permit, Third Party Cold Store production management system	For more information visit the Department of Agriculture, Water and the Environment website.
From Establishment number	A number issued by Federal and State Authorities to identify the originating site from which meat or meat products were distributed to domestic or export markets. For transfer certificates, the Establishment numbers for both the dispatching and receiving establishments are recorded.	Yes	Carcase Ticket, Carton label, Certificate of Analysis (COA), Delivery Docket/Manifest, Export Health Certificate, Meat Messaging Consignment Report, Meat Transfer Certificate (MTC), SSCC/Pallet label, Third Party Cold Store production management system	
Global Trade Item Number (GTIN)	Encoded in the GS1 barcode, the GTIN is a globally unique 14-digit number used to identify trade items, products, or services.	Yes	Carcase Ticket, Carton label, Meat Messaging Consignment Report, SSCC/Pallet label, Third	For more information visit the GS1 website.

			Party Cold Store production management system	
GTIN of Contained Trade Items	Encoded in the GS1 barcode, the GTIN of the contained trade items is a globally unique 14- digit number used to identify trade items, products, or services in the logistic unit.	Yes	SSCC/Pallet label, Third Party Cold Store production management system	For more information visit the GS1 website.
Lot number	A lot is a number assigned by the processor to each group of cattle consigned to slaughter and is usually vendor specific.	Yes	Carcase Ticket, Third Party Cold Store production management system	
Movement date	The date on which livestock or other products (e.g., feed or meat products) were transported between PICs/establishments.	Yes	Bill of lading/Air Waybill, Certificate of Analysis (COA), Delivery Docket/Manifest, Export Health Certificate, Meat Transfer Certificate (MTC), Third Party Cold Store production management system	
MSA eating quality group/grade	This identifies carcases with similar MSA and eating quality grades, these may align with brands packed by the processor for logistic simplicity. Carcases are grouped for boning according to eating quality grades.	Yes	MSA Carcase Ticket, Third Party Cold Store production management system	For more information on MSA visit the MLA website.
MSA Licence Number	Any establishment consigning, supplying, or identifying MSA Certified Product must be registered and have a unique MSA Licence Number.	Yes	Receipt of purchase/Tax Invoice, Third Party Cold Store production management system	For more information on MSA visit the MLA website.
Net Weight (Kilograms)	Usually encoded in the GS1 barcode, the Net Weight is a variable measure of the trade item e.g., carton, pallet or shipment recorded in kilograms.	Yes	Bill of lading/Air Waybill, Carcase Ticket, Carton label, Export Health Certificate, Meat Messaging Consignment Report, SSCC/Pallet label, Third Party Cold Store production management system	For more information visit the GS1 website.
Official mark	Any stamp, seal, label, or mark that is declared by the regulations to be an official	Yes	Carcase Ticket, Carton label, SSCC/Pallet label, Third Party Cold Store	For more information visit the

Order date	mark. An official mark signifies that the product has been inspected by and approved as safe for human consumption by an Authorised Officer. This is the date on which the purchase order or contract was raised by the buyer.	Yes	production management system Delivery Docket/Manifest, Third Party Cold Store production management system	Australian Government Federal Register of Legislation.
Packaging Date	Encoded in the GS1 barcode, the Packaging Date is the date on which the item was packaged and is recorded in the format year, month, day (YYMMDD).	Yes	Carton label, Certificate of Analysis (COA), SSCC/Pallet label, Third Party Cold Store production management system	For more information visit the GS1 website.
Packaging Date Range	This includes the oldest and newest packaging dates for the logistic unit.	Yes	SSCC/Pallet label, Third Party Cold Store production management system	
Pallet Serial Shipping Container Code (SSCC)	Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., pallet that is assigned by the establishment constructing the unit. The SSCC remains the same for the life of the logistic unit.	Yes	Meat Messaging Consignment Report, Meat Transfer Certificate (MTC), SSCC/Pallet label, Third Party Cold Store production management system	For more information visit the GS1 website.
Production Date (YYMMDD)	Encoded in the GS1 barcode, this is the 'kill' or slaughter' date of the product and is recorded in the format year, month, day (YYMMDD).	Yes	Carcase Ticket, Meat Transfer Certificate (MTC), Third Party Cold Store production management system	For more information visit the GS1 website.
Recipient Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Receipt of purchase/Tax Invoice, Third Party Cold Store production management system	For more information visit the ATO website.
Seal Serial Number	This is a unique serial number printed on any tamper-evident seal issued by the Department.	Yes	Bill of lading/Air Waybill, Meat Transfer Certificate (MTC), Official seal, Third Party Cold Store production management system	For more information visit the Australian Government Federal Register of Legislation.

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Seller/Supplier Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Receipt of purchase/Tax Invoice, Third Party Cold Store production management system	For more information visit the ATO website.
Serial Number	Encoded in the GS1 barcode, this is a code, numeric or alphanumeric, assigned to an individual instance of an item for its lifetime.	Yes	Carcase Ticket, Carton label, Third Party Cold Store production management system	For more information visit the GS1 website.
Shipping Mark	Also known as a port mark, this is a code comprising of three letters representing the foreign establishment number and the last nine digits of the consignment SSCC.	Yes	Bill of lading/Air Waybill, Certificate of Analysis (COA), Delivery Docket/Manifest, Export Health Certificate, Meat Messaging Consignment Report, SSCC/Pallet label, Third Party Cold Store production management system	
To Establishment number	A number issued by Federal and State Authorities to identify the originating site from which meat or meat products were distributed to domestic or export markets. For transfer certificates, the Establishment numbers for both the dispatching and receiving establishments are recorded.	Yes	Meat Transfer Certificate (MTC), Third Party Cold Store production management system	
Trade description	This is a collective set of words that says what the product is and may include information such as species, net weight of product, name and address of establishments, category ciphers, market endorsements, MSA eating quality etc.	Yes	Carcase Ticket, Carton label, Delivery Docket/Manifest, Export Health Certificate, Meat Messaging Consignment Report, Meat Transfer Certificate (MTC), SSCC/Pallet label, Third Party Cold Store production management system	
Transfer Certificate number	A unique certificate number issued for traceability purposes.	Yes	Meat Messaging Consignment Report, Meat Transfer Certificate (MTC), Third Party Cold Store production management system	For more information visit the Department of Agriculture, Water and the Environment website.

Transport	The registration number of the	Yes	Bill of lading/Air Waybill,	
registration number	vehicle in which the animals or		Delivery Docket/Manifest,	
	product were transported. For		Export Health Certificate,	
	shipments of product this will be		Meat Messaging	
	a shipping container number.		Consignment Report, Meat	
			Transfer Certificate (MTC),	
			Third Party Cold Store	
			production management	
			system	

5.2.3.3.5 Regulatory and Industry Programs

- * Meat Standards Australia (MSA)
- * AUS-MEAT
- * Australian Meat Industry Council (AMIC)
- * Department of Agriculture
- * Meat Messaging
- * Other data sources
- * State food authority

5.2.3.3.6 Supply Chain Node Traceability

The traceability of third-party cold store product back to the live animal and property of origin is dependent on the form in which product enters the storage premises. This may include whole carcase, cartoned or palletised form.

Traceability of whole carcases back to the live animal is possible and can be done by the processing establishment where the animal was slaughtered. Here, carcases are issued a carcase ticket which correlates to the live animal identifier and contains key information, including GS1 meat industry barcode, body number, processing establishment number and production date or 'kill date'. This information is uploaded to the NLIS Database, by the processor, under the processing establishments Property Identification Code (PIC). Thus, whole carcases (identified with a unique serialised carcase ticket) within a processing facility, chiller, cold store, or that are loaded for export or transport to other premises (e.g., retail) are fully traceable back to the individual live animal and property of origin.

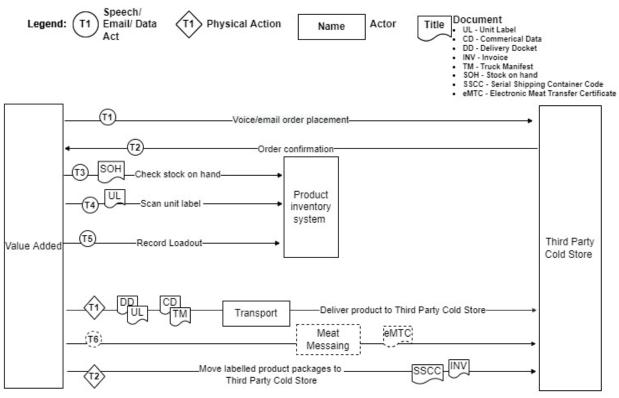
Traceability for cartoned and palletised product is limited to the carcases that have entered the boning room for the production run of cartons that are created. For example, 200 carcases (400 sides) individually identified with unique carcase tickets enter the boning room for a specific boning run. These carcase tickets are linked to the specific boning run. From these carcases, 3 200 cartons of primal cuts and 1 000 cartons of trim and other highly mixed products are created. While all cartons are identified with unique serialised carton labels, including a GS1 meat industry barcode, linked to the boning run (and may be packaged into pallets containing unique serialised pallet labels including a GS1 SSCC barcode), it is not readily possible to identify which carcases are in which cartons as the cartons will contain meat products from different carcases. If the carcases were sourced from several different properties, the resulting carton can only be traced to a number of possible carcases and source properties. In logistical systems such as transport and cold stores, cartons are typically processed by pallets with only the pallet label being scanned. Therefore, traceability through logistics is often at the pallet level.

5.2.3.3.7 Data flow diagrams

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Table 94. Data flow diagrams	for the inputs and output	ts of a beef value-added system
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Description	
Value added to Third Party Store	
Cold Store (cartons) to Third Party Store	
Cold Store (carcase) to Third Party Store	
Third Party cold store to Supermarket	
Third Party cold store to Butcher	
Third Party cold store to Food Services	
Third Party cold store to Value Add	
Third Party cold store to Non-packer exporter	
Third Party cold to Export	
	Value added to Third Party Store Cold Store (cartons) to Third Party Store Cold Store (carcase) to Third Party Store Third Party cold store to Supermarket Third Party cold store to Butcher Third Party cold store to Food Services Third Party cold store to Value Add Third Party cold store to Non-packer exporter

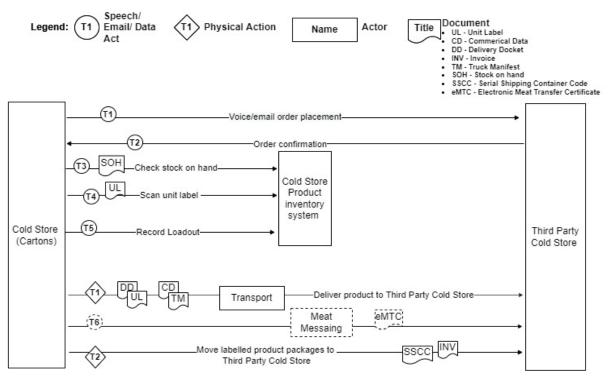
5.2.3.3.7.1 Value Added to Third Party Store



Value Added to Third Party Cold Store

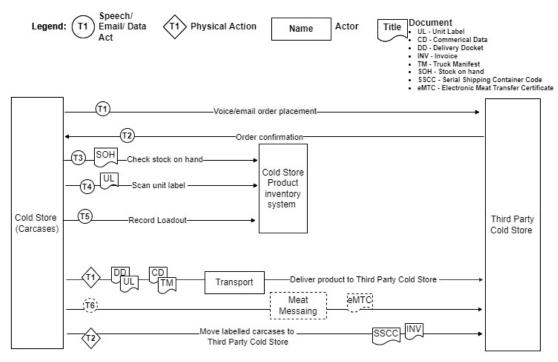
Figure 110 Data or information flows from the value added to third party cold store systems in the beef supply chain.

5.2.3.3.7.2 Cold Store (cartons) to Third Party Store



Cold Store (Cartons) to Third Party Cold Store

Figure 111 Data or information flows from the cold store (carton) loadout to third-party cold store systems in the beef supply chain.

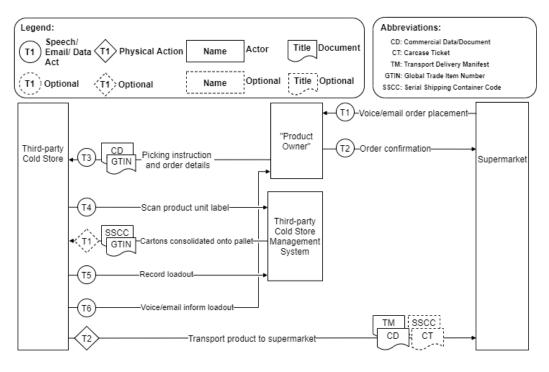


5.2.3.3.7.3 Cold Store (carcase) to Third Party Store

Cold Store (Carcases) to Third Party Cold Store

Figure 112 Data or information flows from the cold store (carcasses) loadout to third-party cold store systems in the beef supply chain.

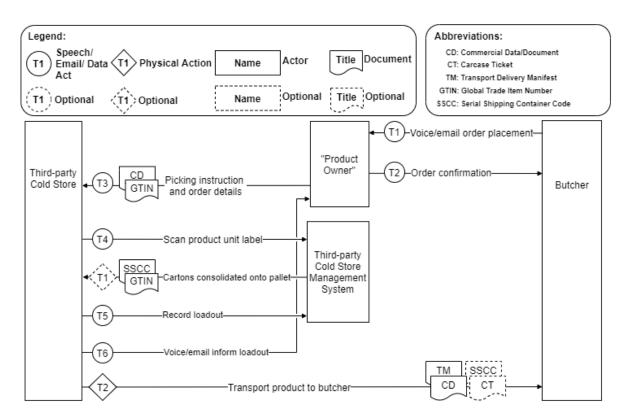
5.2.3.3.7.4 Third Party Cold Store to Supermarket



Third-party Cold Store to Supermarket

Figure 113 Data or information flows from third party cold tore to supermarket systems in the beef supply chain.

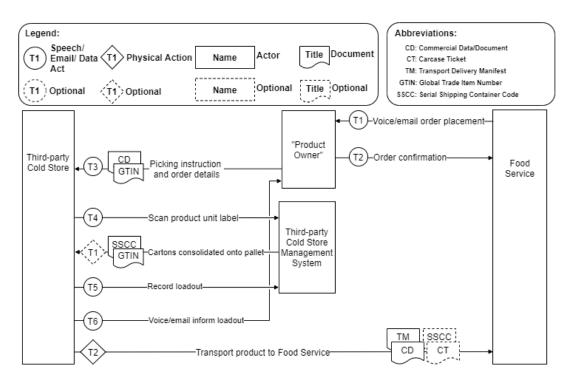
5.2.3.3.7.5 Third Party Cold Store to Butcher



Third-party Cold Store to Butcher

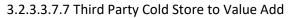
Figure 114 Data or information flows from third party cold store to butcher systems in the beef supply chain.

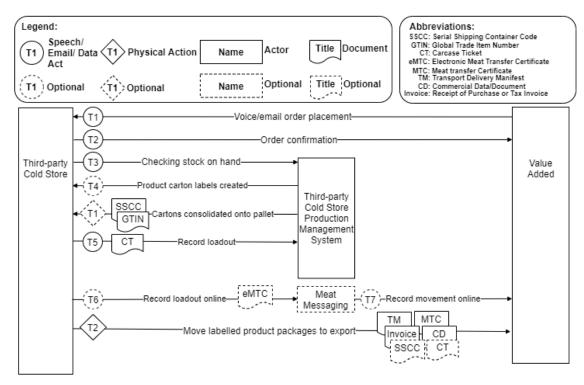
3.2.3.3.7.6 Third Party Cold Store to Food Services



Third-party Cold Store to Food Service

Figure 115 Data or information flows from third party cold store to food service systems in the beef supply chain.

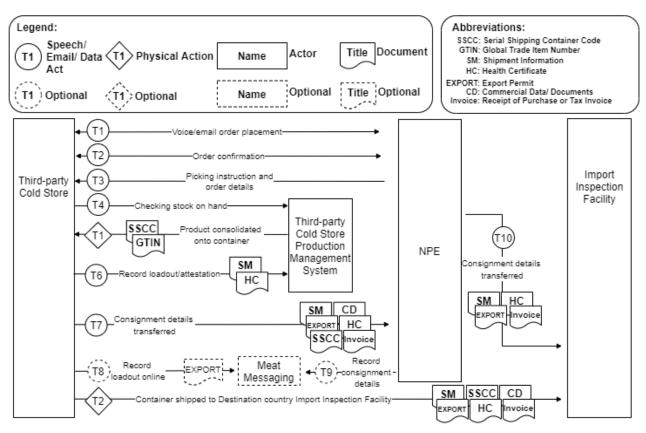




Third-party Cold Store to Value Added

Figure 116 Data or information flows from the third party cold store to value added systems in the beef supply chain.





Third-party Cold Store to Non Packer Exporter (NPE)

Figure 117 Data or information flows from the third party cold store to non-packer exporter systems in the beef supply chain.

5.2.3.4 Supermarket

Supermarkets are product distribution centres whereby retail-ready product is sourced from suppliers (processors, independent boning room or third-party cold store) or product is prepared on-site from carcase or cartoned product. These distribution centres may be chain or retail stores which assemble these goods, sourced from individual suppliers, for purchase by consumers. Product may be pre-packaged and branded by the supplier or by the supermarket and each item identified with a retail-ready product label. For MSA product, the supermarket must be an MSA licenced premises, and all products must be clearly labelled with the cooking method and MSA grade.

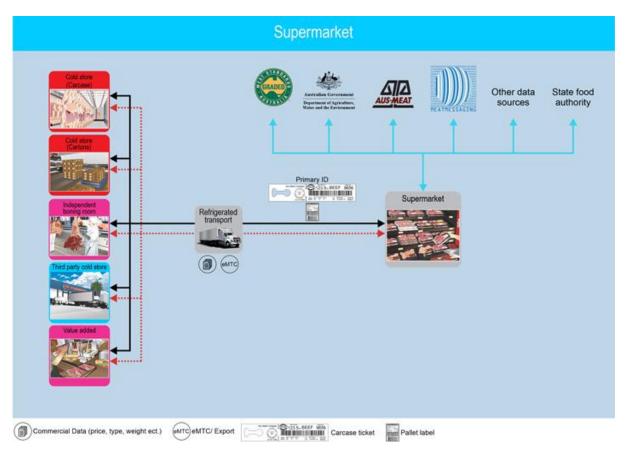


Figure 118. Inputs and outputs of the beef supply chain supermarket sector.

5.2.3.4.1 Physical Inputs including Critical Tracking Events (CTEs)

The inputs for the domestic supermarket include meat product in carcase form for onsite butchering as well as pre-packaged product from boning room and value adding facilities. Critical Tracking Event related documentation for the movement of product into supermarkets includes standard movement documentation such as the Delivery Docket/Manifest, Meat Transfer Certificate, carton, and pallet labels.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with inputs to the supermarket system include the receival of:

- * Carcase
- * Carton
- * Pallet.

 Table 95. Physical inputs and associated Critical Tracking Event related documents for a beef supermarket system.

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Carcase	The body of a slaughtered animal after bleeding. Becomes a dressed	Carcase Ticket, Delivery Docket/Manifest, Meat Transfer Certificate (MTC), MSA Carcase Ticket,	

	carcase when hide, head, feet and offal are removed.	Retail production management system, Receipt of purchase/Tax Invoice	
Carton	This is a case, crate, or barrel of product.	Carton label, Delivery Docket/Manifest, Meat Transfer Certificate (MTC), Official seal, Receipt of purchase/Tax Invoice, Retail production management system	
Pallet	A logistic unit which includes a number of cartons or goods items packed together for transport or storage purposes.	Delivery Docket/Manifest, Meat Transfer Certificate (MTC), Retail production management system, Receipt of purchase/Tax Invoice, SSCC/Pallet label	

5.2.3.4.2 Information Inputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). Information inputs or KDEs for the movement of meat product into the supermarket can be found on Critical Tracking Event related documentation and is stored in the retailer's production management system.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Body number	This is a number assigned to each carcase by the processor for identification purposes.	Yes	Carcase Ticket, Retail production management system	
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Carton label, Receipt of purchase/Tax Invoice, Retail production management system, SSCC/Pallet label	
Consignment Serial Shipping Container Code (SSCC)	Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., shipment/message that is assigned by the establishment constructing the unit. The SSCC remains the same for the life of the logistic unit.	Yes	Meat Transfer Certificate (MTC), Retail production management system, SSCC/Pallet label	For more information visit the GS1 website.
Contract number	This is a unique number allocated to the contract by the seller.	Yes	Delivery Docket/Manifest, Retail production management system	

Table 96. Information inputs, Key Data Elements and Critical Tracking Event related documentation for a beef supermarket system.

Count of Trade	Usually encoded in the GS1 barcode,	Yes	Delivery	For more
Items	this is the number of trade items e.g., cartons in the logistic unit.	res	Docket/Manifest, Retail production management system, SSCC/Pallet label	For more information visit the GS1 website.
Date	This is the date of signing or of which a record entry or transaction was made.	Yes	Delivery Docket/Manifest, Meat Transfer Certificate (MTC), Receipt of purchase/Tax Invoice, Retail production management system	
Delivery Docket/Manifest number	This is a unique number allocated to the docket for identification purposes.	Yes	Delivery Docket/Manifest, Retail production management system	
From Establishment number	A number issued by Federal and State Authorities to identify the originating site from which meat or meat products were distributed to domestic or export markets. For transfer certificates, the Establishment numbers for both the dispatching and receiving establishments are recorded.	Yes	Carcase Ticket, Carton label, Delivery Docket/Manifest, Meat Transfer Certificate (MTC), Retail production management system, SSCC/Pallet label	
Global Trade Item Number (GTIN)	Encoded in the GS1 barcode, the GTIN is a globally unique 14-digit number used to identify trade items, products, or services.	Yes	Carcase Ticket, Carton label, Retail production management system, SSCC/Pallet label	For more information visit the GS1 website.
GTIN of Contained Trade Items	Encoded in the GS1 barcode, the GTIN of the contained trade items is a globally unique 14-digit number used to identify trade items, products, or services in the logistic unit.	Yes	Retail production management system, SSCC/Pallet label	For more information visit the GS1 website.
Lot number	A lot is a number assigned by the processor to each group of cattle consigned to slaughter and is usually vendor specific.	Yes	Carcase Ticket, Retail production management system	
Movement date	The date on which livestock or other products (e.g., feed or meat products) were transported between PICs/establishments.	Yes	Delivery Docket/Manifest, Meat Transfer Certificate (MTC),	

			Retail production management system	
MSA Licence Number	Any establishment consigning, supplying, or identifying MSA Certified Product must be registered and have a unique MSA Licence Number.	Yes	Receipt of purchase/Tax Invoice, Retail production management system	For more information on MSA visit the MLA website.
Net Weight (Kilograms)	Usually encoded in the GS1 barcode, the Net Weight is a variable measure of the trade item e.g., carton, pallet or shipment recorded in kilograms.	Yes	Carcase Ticket, Carton label, Retail production management system, SSCC/Pallet label	For more information visit the GS1 website.
Official mark	Any stamp, seal, label, or mark that is declared by the regulations to be an official mark. An official mark signifies that the product has been inspected by and approved as safe for human consumption by an Authorised Officer.	Yes	Carcase Ticket, Carton label, Retail production management system, SSCC/Pallet label	For more information visit the Australian Government Federal Register of Legislation.
Order date	This is the date on which the purchase order or contract was raised by the buyer.	Yes	Delivery Docket/Manifest, Retail production management system	
Packaging Date	Encoded in the GS1 barcode, the Packaging Date is the date on which the item was packaged and is recorded in the format year, month, day (YYMMDD).	Yes	Carton label, Retail production management system, SSCC/Pallet label	For more information visit the GS1 website.
Packaging Date Range	This includes the oldest and newest packaging dates for the logistic unit.	Yes	Retail production management system, SSCC/Pallet label	
Pallet Serial Shipping Container Code (SSCC)	Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., pallet that is assigned by the establishment constructing the unit. The SSCC remains the same for the life of the logistic unit.	Yes	Meat Transfer Certificate (MTC), Retail production management system, SSCC/Pallet label	For more information visit the GS1 website.
Production Date (YYMMDD)	Encoded in the GS1 barcode, this is the 'kill' or slaughter' date of the product and is recorded in the format year, month, day (YYMMDD).	Yes	Carcase Ticket, Meat Transfer Certificate (MTC), Retail	For more information visit the GS1 website.

		r	1 1	1
			production	
			management system	
Recipient Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Receipt of purchase/Tax Invoice, Retail production management system	For more information visit the ATO website.
Seal Serial Number	This is a unique serial number printed on any tamper-evident seal issued by the Department.	Yes	Meat Transfer Certificate (MTC), Official seal, Retail production management system	For more information visit the Australian Government Federal Register of Legislation.
Seller/Supplier Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Receipt of purchase/Tax Invoice, Retail production management system	For more information visit the ATO website.
Serial Number	Encoded in the GS1 barcode, this is a code, numeric or alphanumeric, assigned to an individual instance of an item for its lifetime.	Yes	Carcase Ticket, Carton label, Retail production management system	For more information visit the GS1 website.
Shipping Mark	Also known as a port mark, this is a code comprising of three letters representing the foreign establishment number and the last nine digits of the consignment SSCC.	Yes	Delivery Docket/Manifest, Retail production management system, SSCC/Pallet label	
To Establishment number	A number issued by Federal and State Authorities to identify the originating site from which meat or meat products were distributed to domestic or export markets. For transfer certificates, the Establishment numbers for both the dispatching and receiving establishments are recorded.	Yes	Meat Transfer Certificate (MTC), Retail production management system	
Trade description	This is a collective set of words that says what the product is and may include information such as species, net weight of product, name and address of establishments, category ciphers, market endorsements, MSA eating quality etc.	Yes	Carcase Ticket, Carton label, Delivery Docket/Manifest, Meat Transfer Certificate (MTC), Retail production management system, SSCC/Pallet label	

Transfer Certificate number	A unique certificate number issued for traceability purposes.	Yes	Meat Transfer Certificate (MTC), Retail production management system	For more information visit the Department of Agriculture, Water and the Environment website.
Transport registration number	The registration number of the vehicle in which the animals or product were transported. For shipments of product this will be a shipping container number.	Yes	Delivery Docket/Manifest, Meat Transfer Certificate (MTC), Retail production management system	
MSA eating quality group/grade	This identifies carcases with similar MSA and eating quality grades, these may align with brands packed by the processor for logistic simplicity. Carcases are grouped for boning according to eating quality grades.	Yes	MSA Carcase Ticket	For more information on MSA visit the MLA website.

5.2.3.4.3 Physical Outputs including Critical Tracking Events (CTEs)

Retail ready meat products are the outputs of the supermarket system. Being purchased by consumers, CTE documentation includes the product label and receipt of purchase with product exiting the system being recorded in the retailer's production management system.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with the outputs of the supermarket system include the movement of: * Retail Ready Product

off the property, premises, or supply chain sector.

Table 97. Physical outputs and associated	Critical Tracking Event related	documents for a beef supermarket system.
	· · · · · · · · · · · · · · · · · · ·	

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Retail Ready Product	These are packaged meat products that are ready to be retailed and purchased by consumers.	Retail product label, Receipt of purchase/Tax Invoice, Retail production management system	

5.2.3.4.4 Information Outputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). Information outputs from the supermarket system include KDEs which can be drawn from CTE documentation such the product label and receipt of purchase. This may include purchase date, product code and application identifiers on the GS1 barcode.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Receipt of purchase/Tax Invoice, Retail production management system	
Date	This is the date of signing or of which a record entry or transaction was made.	Yes	Receipt of purchase/Tax Invoice, Retail production management system	
GS1 compliant numbering and barcode	Numbering and barcode compliant to the GS1 standards and as specified by the contract between the seller and the recipient i.e., retailer.	Yes	Retail product label, Retail production management system	For more information visit the GS1 website.
MSA Licence Number	Any establishment consigning, supplying, or identifying MSA Certified Product must be registered and have a unique MSA Licence Number.	Yes	Receipt of purchase/Tax Invoice, Retail production management system	<u>For more</u> <u>information on</u> <u>MSA visit the</u> <u>MLA website.</u>
Recipient Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Receipt of purchase/Tax Invoice, Retail production management system	For more information visit the ATO website.
Seller/Supplier Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Receipt of purchase/Tax Invoice, Retail production management system	For more information visit the ATO website.

Table 98. Information outputs, Key Data Elements and Critical Tracking Event related documentation for a beef supermarket system.

- 5.2.3.4.5 Regulatory and Industry Programs
- * Meat Standards Australia (MSA)
- * AUS-MEAT
- * Australian Meat Industry Council (AMIC)

- * Department of Agriculture
- * Meat Messaging
- * Other data sources
- * State food authority

5.2.3.4.6 Supply Chain Node Traceability

The traceability of retail ready product back to the live animal and property of origin is dependent on the form in which product enters the retail premises. This may include whole carcase, cartooned, or palletised form. Further, the level of traceability for each input form is dependent on the packaging processes of the retailer. For example, whole carcase product may or may not be fully traceable back to the live animal. Where this is true, carcases are broken down into retail cuts on site and may be packaged individually and labelled with a unique, serialised retail label. For this product, traceability back to the live animal is possible and can be done by the processing establishment where the animal was slaughtered. Here, carcases are issued a carcase ticket which correlates to the live animal NLIS ID tag and contains key information, including body number, processing establishment number and production date or 'kill date'. This information is uploaded to the NLIS Database, by the processor, under the processing establishments Property Identification Code (PIC). Thus, there is the potential to trace whole carcases entering retail premises back to the individual live animal and property of origin. Where carcase retail cuts are not individually packaged or are derived from palletised or cartoned product, retail ready product may have the same batch traceability limitations as per boning room and value-added product. Please refer to Boning room and Value Added 'Supply Chain Node Traceability' for more information.

5.2.3.4.7 Data flow diagrams

Direction	Description
Input	Cold Store (carcase) to Supermarket
Input	Cold Store (cartons) to Supermarket
Input	Independent Boning Room to Supermarket
Input	Third Party Cold Store to Supermarket
Input	Value Add to Supermarket

Table 99 Data Flow Diagrams for the inputs and outputs of the beef supermarket system

5.2.3.4.7.1 Cold Store (carcase) to Supermarket

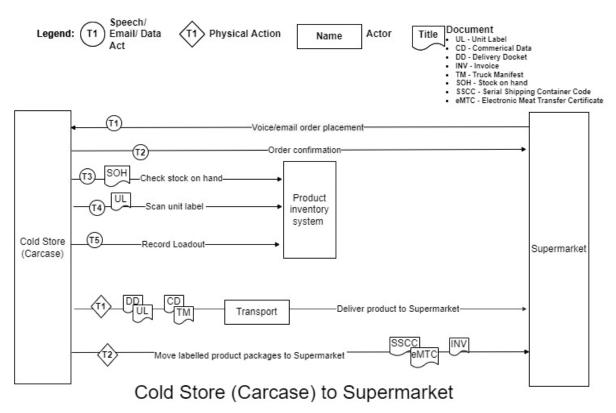


Figure 119 Data or information flows from the cold store (carcase) supermarket systems in the beef supply chain.

5.2.3.4.7.2 Cold Store (cartons) to Supermarket

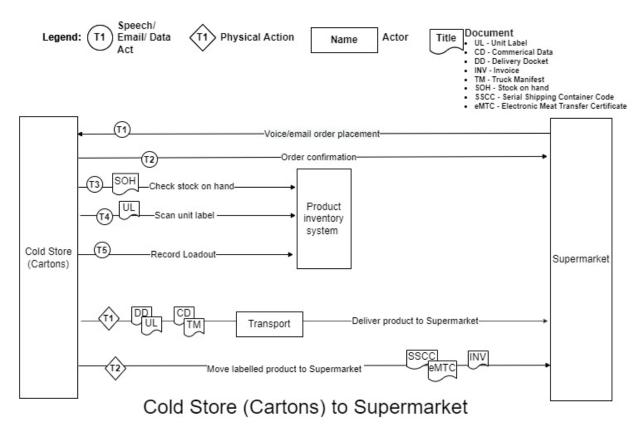


Figure 120 Data or information flows from the cold store (carton) to supermarket systems in the beef supply chain.

5.2.3.4.7.3 Independent Boning Room to Supermarket

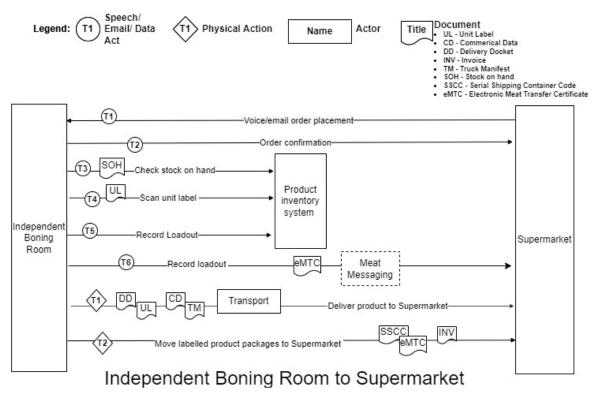
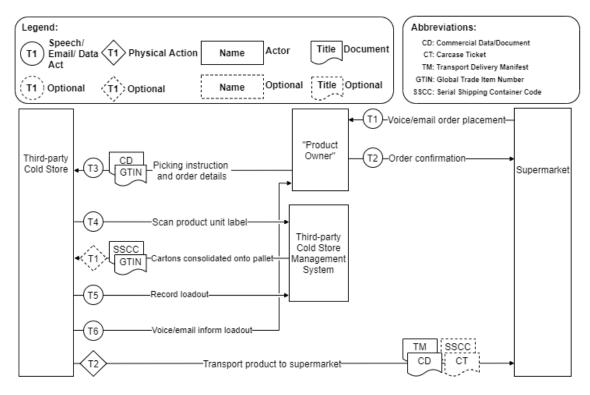


Figure 121 Data or information flows from the independent boning room to supermarket systems in the beef supply chain.

5.2.3.4.7.4 Third Party Cold Store to Supermarket



Third-party Cold Store to Supermarket

Figure 122 Data or information flows from the third party cold store to supermarket systems in the beef supply chain.

5.2.3.4.7.5 Value Add to Supermarket

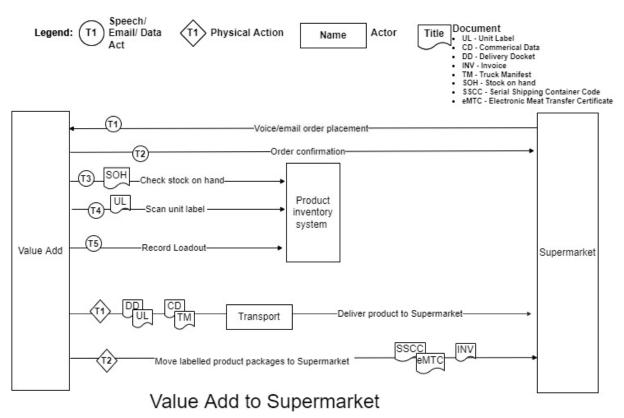


Figure 123 Data or information flows from the value add to supermarket systems in the beef supply chain.

5.2.3.5 Butcher

Butchers are meat and meat product retail stores whereby carcase or cartoned product is sourced from processors, third-party cold stores, independent boning rooms or value adders, and is prepared for sale to the consumer. This preparation may include value adding processes whereby a new variety of cuts is provided, the presentation of products is altered, or additional ingredients are added to create new products or enhance the profitability of raw product. For example, cutting primal products into steaks, roasts, or diced product, marinating meat to save time for the consumer, as well as making specialty goods such as mixed sausages and offal. For MSA product, the butcher must be an MSA licenced premises and all product must be clearly labelled with the cooking method and MSA grade.

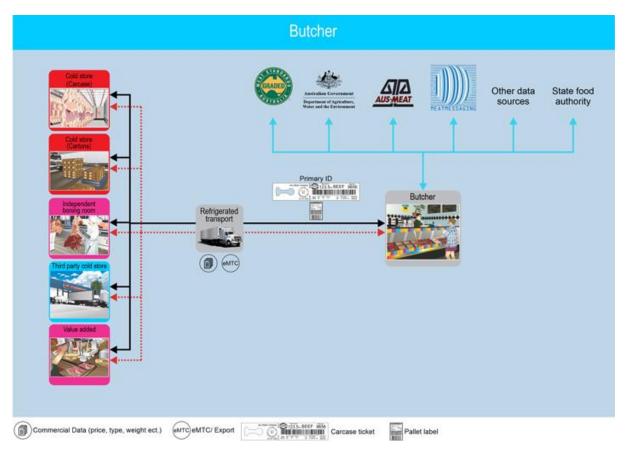


Figure 124. Inputs and outputs of the beef supply chain butcher sector.

5.2.3.5.1 Physical Inputs including Critical Tracking Events (CTEs)

The inputs to the butcher system include meat product in carcase form for onsite butchering as well primal or value-added product from boning room and value adding facilities. Critical Tracking Event related documentation for the movement of product into butchers includes standard movement documentation such as the Delivery Docket/Manifest, Meat Transfer Certificate, carton, and pallet labels.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with inputs to the butcher system include the receival of:

- * Carcase
- * Carton
- * Pallet.

Table 100. Physical inputs and associated Critical Tracking Event related documents for a beef butcher system.

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Carcase	The body of a slaughtered animal after bleeding. Becomes a dressed	Carcase Ticket, Delivery Docket/Manifest, Meat Transfer Certificate (MTC), MSA Carcase Ticket,	

	carcase when hide, head, feet and offal are removed.	Retail production management system, Receipt of purchase/Tax Invoice	
Carton	This is a case, crate, or barrel of product.	Carton label, Delivery Docket/Manifest, Meat Transfer Certificate (MTC), Official seal, Retail production management system, Receipt of purchase/Tax Invoice	
Pallet	A logistic unit which includes a number of cartons or goods items packed together for transport or storage purposes.	Delivery Docket/Manifest, Meat Transfer Certificate (MTC), Retail production management system, Receipt of purchase/Tax Invoice, SSCC/Pallet label	

5.2.3.5.2 Information Inputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). Information inputs or KDEs for the movement of meat product into the butcher system can be found on Critical Tracking Event related documentation and is stored in the retailer's production management system.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Body number	This is a number assigned to each carcase by the processor for identification purposes.	Yes	Carcase Ticket, Retail production management system	
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Carton label, Receipt of purchase/Tax Invoice, Retail production management system, SSCC/Pallet label	
Consignment Serial Shipping Container Code (SSCC)	Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., shipment/message that is assigned by the establishment constructing the unit. The SSCC remains the same for the life of the logistic unit.	Yes	Meat Transfer Certificate (MTC), Retail production management system, SSCC/Pallet label	For more information visit the GS1 website.
Contract number	This is a unique number allocated to the contract by the seller.	Yes	Delivery Docket/Manifest, Retail production management system	

Table 101. Information inputs, Key Data Elements and Critical Tracking Event related documentation for a beef butcher system.

Count of Trade	Liqually appended in the CS1 barcade	Voc	Delivery	Formoro
Items	Usually encoded in the GS1 barcode, this is the number of trade items e.g., cartons in the logistic unit.	Yes	Delivery Docket/Manifest, Retail production management system, SSCC/Pallet label	For more information visit the GS1 website.
Date	This is the date of signing or of which a record entry or transaction was made.	Yes	Delivery Docket/Manifest, Meat Transfer Certificate (MTC), Receipt of purchase/Tax Invoice, Retail production management system	
Delivery Docket/Manifest number	This is a unique number allocated to the docket for identification purposes.	Yes	Delivery Docket/Manifest, Retail production management system	
From Establishment number	A number issued by Federal and State Authorities to identify the originating site from which meat or meat products were distributed to domestic or export markets. For transfer certificates, the Establishment numbers for both the dispatching and receiving establishments are recorded.	Yes	Carcase Ticket, Carton label, Delivery Docket/Manifest, Meat Transfer Certificate (MTC), Retail production management system, SSCC/Pallet label	
Global Trade Item Number (GTIN)	Encoded in the GS1 barcode, the GTIN is a globally unique 14-digit number used to identify trade items, products, or services.	Yes	Carcase Ticket, Carton label, Retail production management system, SSCC/Pallet label	For more information visit the GS1 website.
GTIN of Contained Trade Items	Encoded in the GS1 barcode, the GTIN of the contained trade items is a globally unique 14-digit number used to identify trade items, products, or services in the logistic unit.	Yes	Retail production management system, SSCC/Pallet label	For more information visit the GS1 website.
Lot number	A lot is a number assigned by the processor to each group of cattle consigned to slaughter and is usually vendor specific.	Yes	Carcase Ticket, Retail production management system	
Movement date	The date on which livestock or other products (e.g., feed or meat products) were transported between PICs/establishments.	Yes	Delivery Docket/Manifest, Meat Transfer Certificate (MTC),	

			Retail production management system	
MSA eating quality group/grade	This identifies carcases with similar MSA and eating quality grades, these may align with brands packed by the processor for logistic simplicity. Carcases are grouped for boning according to eating quality grades.	Yes	MSA Carcase Ticket, Retail production management system	For more information on MSA visit the MLA website.
MSA Licence Number	Any establishment consigning, supplying, or identifying MSA Certified Product must be registered and have a unique MSA Licence Number.	Yes	Receipt of purchase/Tax Invoice, Retail production management system	For more information on MSA visit the MLA website.
Net Weight (Kilograms)	Usually encoded in the GS1 barcode, the Net Weight is a variable measure of the trade item e.g., carton, pallet or shipment recorded in kilograms.	Yes	Carcase Ticket, Carton label, Retail production management system, SSCC/Pallet label	For more information visit the GS1 website.
Official mark	Any stamp, seal, label, or mark that is declared by the regulations to be an official mark. An official mark signifies that the product has been inspected by and approved as safe for human consumption by an Authorised Officer.	Yes	Carcase Ticket, Carton label, Retail production management system, SSCC/Pallet label	For more information visit the Australian Government Federal Register of Legislation.
Order date	This is the date on which the purchase order or contract was raised by the buyer.	Yes	Delivery Docket/Manifest, Retail production management system	
Packaging Date	Encoded in the GS1 barcode, the Packaging Date is the date on which the item was packaged and is recorded in the format year, month, day (YYMMDD).	Yes	Carton label, Retail production management system, SSCC/Pallet label	For more information visit the GS1 website.
Packaging Date Range	This includes the oldest and newest packaging dates for the logistic unit.	Yes	Retail production management system, SSCC/Pallet label	
Pallet Serial Shipping Container Code (SSCC)	Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., pallet that is assigned by the establishment constructing the unit.	Yes	Meat Transfer Certificate (MTC), Retail production	For more information visit the GS1 website.

	The SSCC remains the same for the life of the logistic unit.		management system, SSCC/Pallet label	
Production Date (YYMMDD)	Encoded in the GS1 barcode, this is the 'kill' or slaughter' date of the product and is recorded in the format year, month, day (YYMMDD).	Yes	Carcase Ticket, Meat Transfer Certificate (MTC), Retail production management system	For more information visit the GS1 website.
Recipient Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Receipt of purchase/Tax Invoice, Retail production management system	For more information visit the ATO website.
Seal Serial Number	This is a unique serial number printed on any tamper-evident seal issued by the Department.	Yes	Meat Transfer Certificate (MTC), Official seal, Retail production management system	For more information visit the Australian Government Federal Register of Legislation.
Seller/Supplier Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Receipt of purchase/Tax Invoice, Retail production management system	For more information visit the ATO website.
Serial Number	Encoded in the GS1 barcode, this is a code, numeric or alphanumeric, assigned to an individual instance of an item for its lifetime.	Yes	Carcase Ticket, Carton label, Retail production management system	For more information visit the GS1 website.
Shipping Mark	Also known as a port mark, this is a code comprising of three letters representing the foreign establishment number and the last nine digits of the consignment SSCC.	Yes	Delivery Docket/Manifest, Retail production management system, SSCC/Pallet label	
To Establishment number	A number issued by Federal and State Authorities to identify the originating site from which meat or meat products were distributed to domestic or export markets. For transfer certificates, the Establishment numbers for both the dispatching and receiving establishments are recorded.	Yes	Meat Transfer Certificate (MTC), Retail production management system	
Trade description	This is a collective set of words that says what the product is and may include information such as species,	Yes	Carcase Ticket, Carton label, Delivery Docket/Manifest,	

	net weight of product, name and address of establishments, category ciphers, market endorsements, MSA eating quality etc.		Meat Transfer Certificate (MTC), Retail production management system, SSCC/Pallet label	
Transfer Certificate number	A unique certificate number issued for traceability purposes.	Yes	Meat Transfer Certificate (MTC), Retail production management system	For more information visit the Department of Agriculture, Water and the Environment website.
Transport registration number	The registration number of the vehicle in which the animals or product were transported. For shipments of product this will be a shipping container number.	Yes	Delivery Docket/Manifest, Meat Transfer Certificate (MTC), Retail production management system	

5.2.3.5.3 Physical Outputs including Critical Tracking Events (CTEs)

Retail ready meat products are the outputs of the butcher system. Being purchased by consumers, CTE documentation includes the product label and receipt of purchase with product exiting the system being recorded in the retailer's production management system.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with the outputs of the butcher system include the movement of:

* Retail Ready Product

off the property, premises, or supply chain sector.

Table 102. Physical outputs and associated Critical Tracking Event related documents for a beef butcher system.

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Retail Ready Product	These are packaged meat products that are ready to be retailed and purchased by consumers.	Retail product label, Receipt of purchase/Tax Invoice, Retail production management system	

5.2.3.5.4 Information Outputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). Information outputs from the butcher system include KDEs which can be drawn from CTE

documentation such as the product label and receipt of purchase. This may include purchase date, product code and application identifiers on the GS1 barcode.

Table 103. Information outputs, Key Data Elements and Critical Tracking Event related documentation for a beef butcher system.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Receipt of purchase/Tax Invoice, Retail production management system	
Date	This is the date of signing or of which a record entry or transaction was made.	Yes	Receipt of purchase/Tax Invoice, Retail production management system	
GS1 compliant numbering and barcode	Numbering and barcode compliant to the GS1 standards and as specified by the contract between the seller and the recipient i.e., retailer.	Yes	Retail product label, Retail production management system	For more information visit the GS1 website.
MSA Licence Number	Any establishment consigning, supplying, or identifying MSA Certified Product must be registered and have a unique MSA Licence Number.	Yes	Receipt of purchase/Tax Invoice, Retail production management system	<u>For more</u> <u>information on</u> <u>MSA visit the</u> <u>MLA website.</u>
Recipient Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Receipt of purchase/Tax Invoice, Retail production management system	For more information visit the ATO website.
Seller/Supplier Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Receipt of purchase/Tax Invoice, Retail production management system	For more information visit the ATO website.

- 5.2.3.5.5 Regulatory and Industry Programs
- * Meat Standards Australia (MSA)
- * AUS-MEAT
- * Australian Meat Industry Council (AMIC)
- * Department of Agriculture
- * Meat Messaging

* Other data sources

* State food authority

5.2.3.5.6 Supply Chain Node Traceability

The traceability of retail ready product back to the live animal and property of origin is dependent on the form in which product enters the retail premises. This may include whole carcase, cartoned or palletised form. Further, the level of traceability for each input form is dependent on the packaging processes of the retailer. For example, whole carcase product may or may not be fully traceable back to the live animal. Where this is true, carcases are broken down into retail cuts on site and may be packaged individually and labelled with a unique, serialised retail label. For this product, traceability back to the live animal is possible and can be done by the processing establishment where the animal was slaughtered. Here, carcases are issued a carcase ticket which correlates to the live animal NLIS ID tag and contains key information, including body number, processing establishment number and production date or 'kill date'. This information is uploaded to the NLIS Database, by the processor, under the processing establishments Property Identification Code (PIC). Thus, there is the potential to trace whole carcases entering retail premises back to the individual live animal and property of origin. Where carcase retail cuts are not individually packaged or are derived from palletised or cartoned product, retail ready product may have the same batch traceability limitations as per boning room and value-added product. Please refer to Boning room and Value Added 'Supply Chain Node Traceability' for more information.

5.2.3.5.7 Data flow diagrams

Description
Independent Boning Room to Butcher
Third Party Cold Store to Butcher
Value Add to Butcher
Cold Store (carcase) to Butcher
Cold Store (cartons) to Butcher

Table 104. Data flow diagrams for the inputs and outputs of a beef butcher system

5.2.3.5.7.1 Independent Boning Room to Butcher

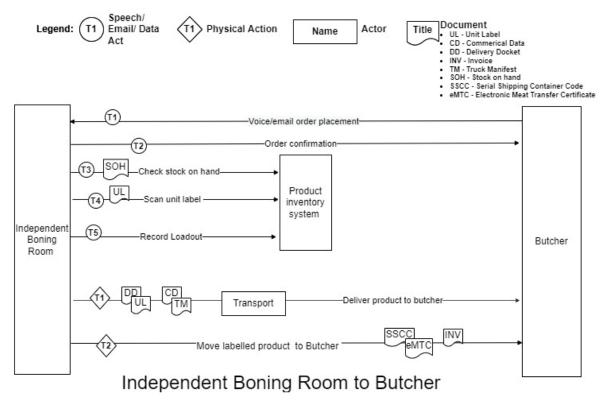
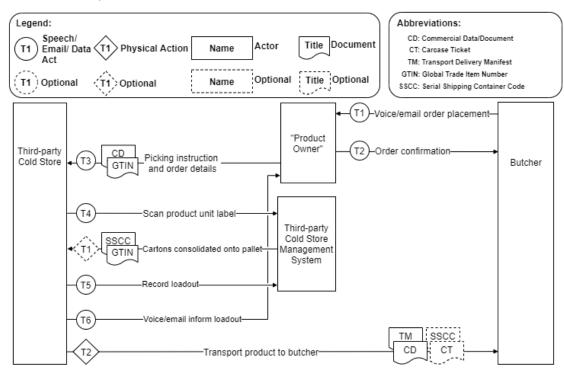


Figure 125. Data or information flows from the independent boning room to butcher systems in the beef supply chain.

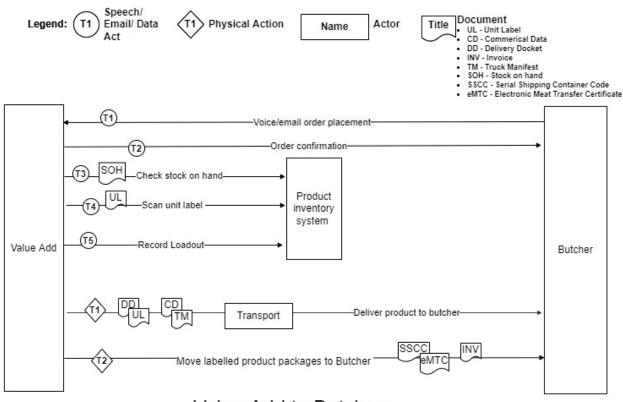
5.2.3.5.7.2 Third Party Cold Store to Butcher



Third-party Cold Store to Butcher

Figure 126. Data or information flows from the third party cold store to butcher systems in the beef supply chain.

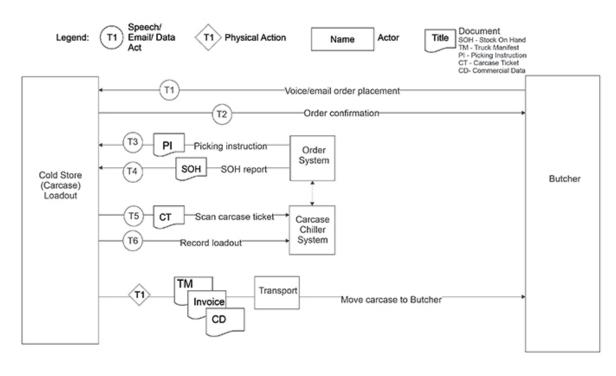
5.2.3.5.7.3 Value Add to Butcher



Value Add to Butcher

Figure 127. Data or information flows from the value add to butcher systems in the beef supply chain.

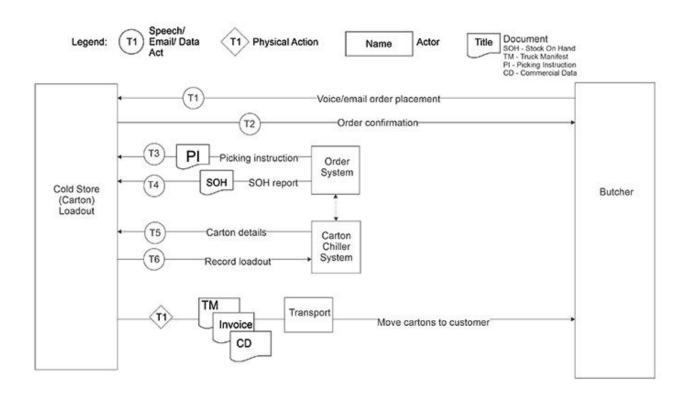
5.2.3.5.7.4 Cold Store (carcase) to Butcher



Cold Store (Carcase) to Butcher

Figure 128. Data or information flows from the cold store (carcase) to the butcher systems in the beef supply chain.

5.2.3.5.7.5 Cold Store (carton) to Butcher



Cold Store (Carton) Loadout to Butcher

Figure 129. Data or information flows from the cold store (carton) loadout to butcher systems in the beef supply chain.

5.2.3.6 Food services

The food service sector includes those businesses which prepare meat products for consumption outside the home and may include schools, catering, cafes, restaurants, and other eateries. Product may be received in carcase or cartoned form and be sourced directly from the processor cold stores, independent boning room, third-party cold store, or value-adder. After preparation (curing or cooking) meals are purchased by the consumer.

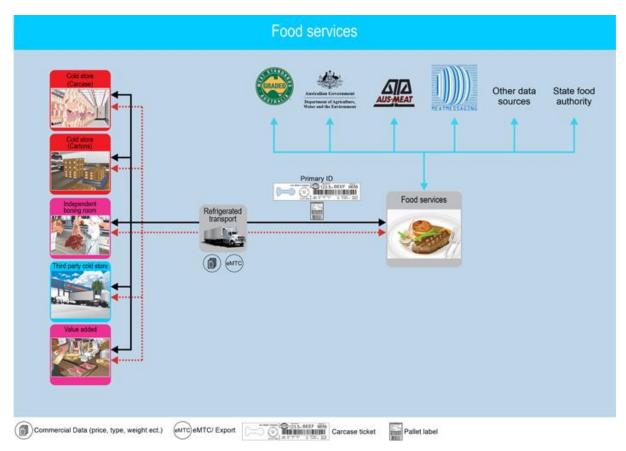


Figure 130. Inputs and outputs of the beef supply chain food services sector.

5.2.3.6.1 Physical Inputs including Critical Tracking Events (CTEs)

The inputs to the food service system include carcase, carton, or palletised product. Critical Tracking Event related documentation for the movement of product into the food service system includes standard movement documentation such as the Delivery Docket/Manifest, Meat Transfer Certificate, carton, and pallet labels.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with inputs to the food services system include the receival of:

- * Carcase
- * Carton
- * Pallet.

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Carcase	The body of a slaughtered animal after bleeding. Becomes a dressed carcase when hide, head, feet and offal are removed.	Carcase Ticket, Delivery Docket/Manifest, Meat Transfer Certificate (MTC), MSA Carcase Ticket, Retail production management system, Receipt of purchase/Tax Invoice	

 Table 105. Physical inputs and associated Critical Tracking Event related documents for a beef food services system.

Carton	This is a case, crate, or barrel of product.	Carton label, Delivery Docket/Manifest, Meat Transfer Certificate (MTC), Official seal, Retail production management system, Receipt of purchase/Tax Invoice	
Pallet	A logistic unit which includes a number of cartons or goods items packed together for transport or storage purposes.	Delivery Docket/Manifest, Meat Transfer Certificate (MTC), Retail production management system, Receipt of purchase/Tax Invoice, SSCC/Pallet label	

5.2.3.6.2 Information Inputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). Information inputs or KDEs for the movement of meat product into the food service system can be found on Critical Tracking Event related documentation and is stored in the retailer's production management system.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Body number	This is a number assigned to each carcase by the processor for identification purposes.	Yes	Carcase Ticket, Retail production management system	
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Carton label, Receipt of purchase/Tax Invoice, Retail production management system, SSCC/Pallet label	
Consignment Serial Shipping Container Code (SSCC)	Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., shipment/message that is assigned by the establishment constructing the unit. The SSCC remains the same for the life of the logistic unit.	Yes	Meat Transfer Certificate (MTC), Retail production management system, SSCC/Pallet label	For more information visit the GS1 website.
Contract number	This is a unique number allocated to the contract by the seller.	Yes	Delivery Docket/Manifest, Retail production management system	

Count of Trade	Liqually approduce in the CS1 barcode	Yes	Delivery	Formoro
Items	Usually encoded in the GS1 barcode, this is the number of trade items e.g., cartons in the logistic unit.	res	Docket/Manifest, Retail production management system, SSCC/Pallet label	For more information visit the GS1 website.
Date	This is the date of signing or of which a record entry or transaction was made.	Yes	Delivery Docket/Manifest, Meat Transfer Certificate (MTC), Receipt of purchase/Tax Invoice, Retail production management system	
Delivery Docket/Manifest number	This is a unique number allocated to the docket for identification purposes.	Yes	Delivery Docket/Manifest, Retail production management system	
From Establishment number	A number issued by Federal and State Authorities to identify the originating site from which meat or meat products were distributed to domestic or export markets. For transfer certificates, the Establishment numbers for both the dispatching and receiving establishments are recorded.	Yes	Carcase Ticket, Carton label, Delivery Docket/Manifest, Meat Transfer Certificate (MTC), Retail production management system, SSCC/Pallet label	
Global Trade Item Number (GTIN)	Encoded in the GS1 barcode, the GTIN is a globally unique 14-digit number used to identify trade items, products, or services.	Yes	Carcase Ticket, Carton label, Retail production management system, SSCC/Pallet label	For more information visit the GS1 website.
GTIN of Contained Trade Items	Encoded in the GS1 barcode, the GTIN of the contained trade items is a globally unique 14-digit number used to identify trade items, products, or services in the logistic unit.	Yes	Retail production management system, SSCC/Pallet label	For more information visit the GS1 website.
Lot number	A lot is a number assigned by the processor to each group of cattle consigned to slaughter and is usually vendor specific.	Yes	Carcase Ticket, Retail production management system	
Movement date	The date on which livestock or other products (e.g., feed or meat products) were transported between PICs/establishments.	Yes	Delivery Docket/Manifest, Meat Transfer Certificate (MTC),	

			Retail production management system	
MSA Licence Number	Any establishment consigning, supplying, or identifying MSA Certified Product must be registered and have a unique MSA Licence Number.	Yes	Receipt of purchase/Tax Invoice, Retail production management system	For more information on MSA visit the MLA website.
Net Weight (Kilograms)	Usually encoded in the GS1 barcode, the Net Weight is a variable measure of the trade item e.g., carton, pallet or shipment recorded in kilograms.	Yes	Carcase Ticket, Carton label, Retail production management system, SSCC/Pallet label	For more information visit the GS1 website.
Official mark	Any stamp, seal, label, or mark that is declared by the regulations to be an official mark. An official mark signifies that the product has been inspected by and approved as safe for human consumption by an Authorised Officer.	Yes	Carcase Ticket, Carton label, Retail production management system, SSCC/Pallet label	For more information visit the Australian Government Federal Register of Legislation.
Order date	This is the date on which the purchase order or contract was raised by the buyer.	Yes	Delivery Docket/Manifest, Retail production management system	
Packaging Date	Encoded in the GS1 barcode, the Packaging Date is the date on which the item was packaged and is recorded in the format year, month, day (YYMMDD).	Yes	Carton label, Retail production management system, SSCC/Pallet label	For more information visit the GS1 website.
Packaging Date Range	This includes the oldest and newest packaging dates for the logistic unit.	Yes	Retail production management system, SSCC/Pallet label	
Pallet Serial Shipping Container Code (SSCC)	Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., pallet that is assigned by the establishment constructing the unit. The SSCC remains the same for the life of the logistic unit.	Yes	Meat Transfer Certificate (MTC), Retail production management system, SSCC/Pallet label	For more information visit the GS1 website.
Production Date (YYMMDD)	Encoded in the GS1 barcode, this is the 'kill' or slaughter' date of the product and is recorded in the format year, month, day (YYMMDD).	Yes	Carcase Ticket, Meat Transfer Certificate (MTC), Retail	For more information visit the GS1 website.

			production management system	
Recipient Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Receipt of purchase/Tax Invoice, Retail production management system	For more information visit the ATO website.
Seal Serial Number	This is a unique serial number printed on any tamper-evident seal issued by the Department.	Yes	Meat Transfer Certificate (MTC), Official seal, Retail production management system	For more information visit the Australian Government Federal Register of Legislation.
Seller/Supplier Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Receipt of purchase/Tax Invoice, Retail production management system	For more information visit the ATO website.
Serial Number	Encoded in the GS1 barcode, this is a code, numeric or alphanumeric, assigned to an individual instance of an item for its lifetime.	Yes	Carcase Ticket, Carton label, Retail production management system	For more information visit the GS1 website.
Shipping Mark	Also known as a port mark, this is a code comprising of three letters representing the foreign establishment number and the last nine digits of the consignment SSCC.	Yes	Delivery Docket/Manifest, Retail production management system, SSCC/Pallet label	
To Establishment number	A number issued by Federal and State Authorities to identify the originating site from which meat or meat products were distributed to domestic or export markets. For transfer certificates, the Establishment numbers for both the dispatching and receiving establishments are recorded.	Yes	Meat Transfer Certificate (MTC), Retail production management system	
Trade description	This is a collective set of words that says what the product is and may include information such as species, net weight of product, name and address of establishments, category ciphers, market endorsements, MSA eating quality etc.	Yes	Carcase Ticket, Carton label, Delivery Docket/Manifest, Meat Transfer Certificate (MTC), Retail production management system, SSCC/Pallet label	

Transfer Certificate number	A unique certificate number issued for traceability purposes.	Yes	Meat Transfer Certificate (MTC), Retail production management system	For more information visit the Department of Agriculture, Water and the Environment website.
Transport registration number	The registration number of the vehicle in which the animals or product were transported. For shipments of product this will be a shipping container number.	Yes	Delivery Docket/Manifest, Meat Transfer Certificate (MTC), Retail production management system	
MSA eating quality group/grade	This identifies carcases with similar MSA and eating quality grades, these may align with brands packed by the processor for logistic simplicity. Carcases are grouped for boning according to eating quality grades.	Yes	MSA Carcase Ticket	For more information on MSA visit the MLA website.

5.2.3.6.3 Physical Outputs including Critical Tracking Events (CTEs)

Retail ready meat products are the outputs of the food service system. Being purchased by consumers, CTE documentation may include the product label and receipt of purchase with product exiting the system being recorded in the retailer's production management system.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with the outputs of the food services system include the movement of:

* Retail Ready Product

off the property, premises, or supply chain sector.

Table 107. Physical outputs and associated Critical Tracking Event related documents for a beef food services system.

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Retail Ready Product	These are packaged meat products that are ready to be retailed and purchased by consumers.	Retail product label, Receipt of purchase/Tax Invoice, Retail production management system	

5.2.3.6.4 Information Outputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). Information outputs from the food service system include KDEs which can be drawn from

CTE documentation such the product label and receipt of purchase. This may include purchase date, product code and application identifiers on the GS1 barcode.

Table 108. Information outputs, Key Data Elements and Critical Tracking Event related documentation for a beef food services system.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Receipt of purchase/Tax Invoice, Retail production management system	
Date	This is the date of signing or of which a record entry or transaction was made.	Yes	Receipt of purchase/Tax Invoice, Retail production management system	
GS1 compliant numbering and barcode	Numbering and barcode compliant to the GS1 standards and as specified by the contract between the seller and the recipient i.e., retailer.	Yes	Retail product label, Retail production management system	For more information visit the GS1 website.
MSA Licence Number	Any establishment consigning, supplying, or identifying MSA Certified Product must be registered and have a unique MSA Licence Number.	Yes	Receipt of purchase/Tax Invoice, Retail production management system	<u>For more</u> <u>information on</u> <u>MSA visit the</u> <u>MLA website.</u>
Recipient Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Receipt of purchase/Tax Invoice, Retail production management system	For more information visit the ATO website.
Seller/Supplier Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Receipt of purchase/Tax Invoice, Retail production management system	For more information visit the ATO website.

- 5.2.3.6.5 Regulatory and Industry Programs
- * Meat Standards Australia (MSA)
- * AUS-MEAT
- * Australian Meat Industry Council (AMIC)
- * Department of Agriculture
- * Meat Messaging

* Other data sources

* State food authority

5.2.3.6.6 Supply Chain Node Traceability

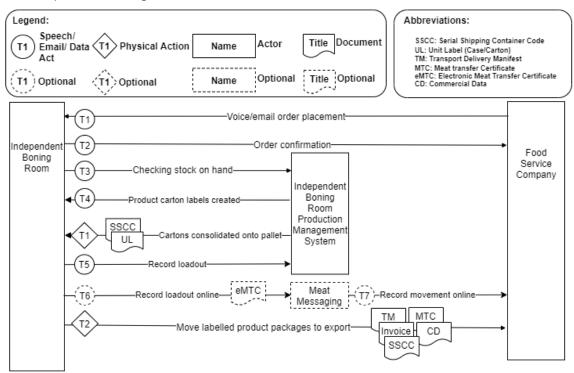
The traceability of retail ready product back to the live animal and property of origin is dependent on the form in which product enters the retail premises. This may include whole carcase, cartoned or palletised form. Further, the level of traceability for each input form is dependent on the packaging processes of the retailer. For example, whole carcase product may or may not be fully traceable back to the live animal. Where this is true, carcases are broken down into retail cuts on site and may be packaged individually and labelled with a unique, serialised retail label. For this product, traceability back to the live animal is possible and can be done by the processing establishment where the animal was slaughtered. Here, carcases are issued a carcase ticket which correlates to the live animal NLIS ID tag and contains key information, including body number, processing establishment number and production date or 'kill date'. This information is uploaded to the NLIS Database, by the processor, under the processing establishments Property Identification Code (PIC). Thus, there is the potential to trace whole carcases entering retail premises back to the individual live animal and property of origin. Where carcase retail cuts are not individually packaged or are derived from palletised or cartoned product, retail ready product may have the same batch traceability limitations as per boning room and value-added product. Please refer to Boning room and Value Added 'Supply Chain Node Traceability' for more information.

5.2.3.6.7 Data flow diagrams

Direction	Description	
Input	Independent Boning Room to Food Service	
Input	Third Party Cold Store to Food Service	
Input	Value Add to Food Service	
Input	Cold Store (carcase) to Food Service	
Input	Cold Store (cartons) to Food Service	

Table 109. Data flow diagrams for the inputs and outputs of a beef food service system

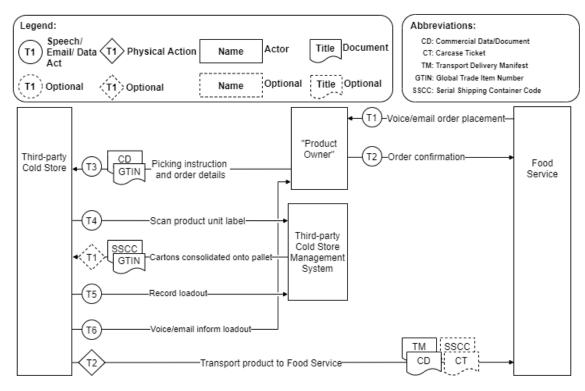
5.2.3.6.7.1 Independent Boning Room to Food Service



Independent Boning Room to Food Service

Figure 131. Data or information flows from the independent boning room to food service systems in the beef supply chain.

5.2.3.6.7.2 Third Party Cold Store to Food Service



Third-party Cold Store to Food Service

Figure 132. Data or information flows from the third party cold store to food service systems in the beef supply chain.

5.2.3.6.7.3 Value Add to Food Service

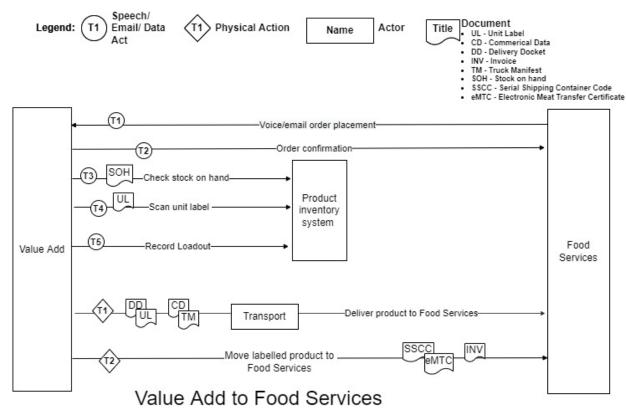
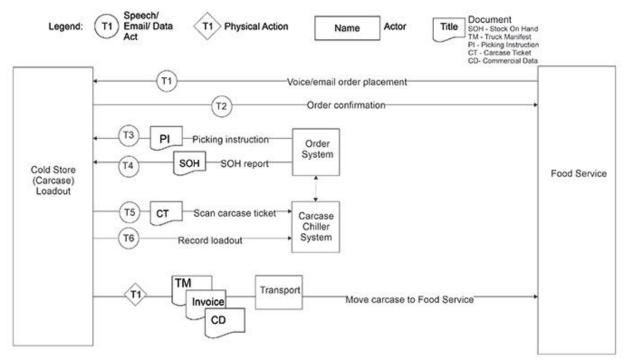


Figure 133. Data or information flows from the value add to food service systems in the beef supply chain.

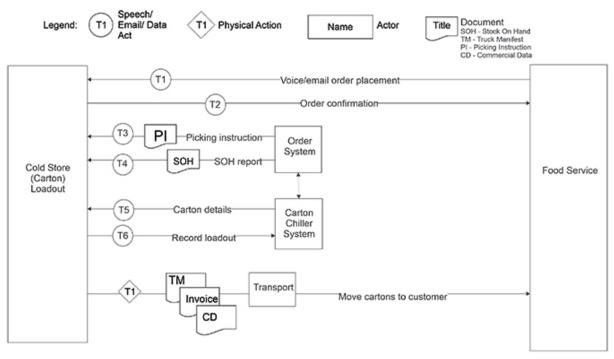
5.2.3.6.7.4 Cold Store (carcase) to Food Service



Cold Store (Carcase) to Food Service

Figure 134. Data or information flows from the cold store (carcase)to food service systems in the beef supply chain.

5.2.3.6.7.5 Cold Store (cartons) to Food Service



Cold Store (Carton) Loadout to Food Service

Figure 135. Data or information flows from the cold store (carton) loadout to food service in the beef supply chain.

5.2.4 Exporting Country - Cross-sector

5.2.4.1 Livestock transport

Livestock transport is the process whereby animals are moved from one property to another by a mode of transport, most commonly truck. This journey requires careful preparation to ensure that animal stress as well as any risks to welfare is minimised. The Australian Animal Welfare Standards and Guidelines, Land Transport and Livestock outline the transportation requirements for livestock movement and are regulated by State legislation. General guidelines state that the livestock should be fit for transport; handled correctly by professionals; that transportation facilities are adequate for the transfer of livestock; that the journey is planned to ensure delivery at the correct time; and that the livestock are cared for, protected, treated for any injury or disease, and supplied adequate feed, water, and shelter for the duration of the transport.

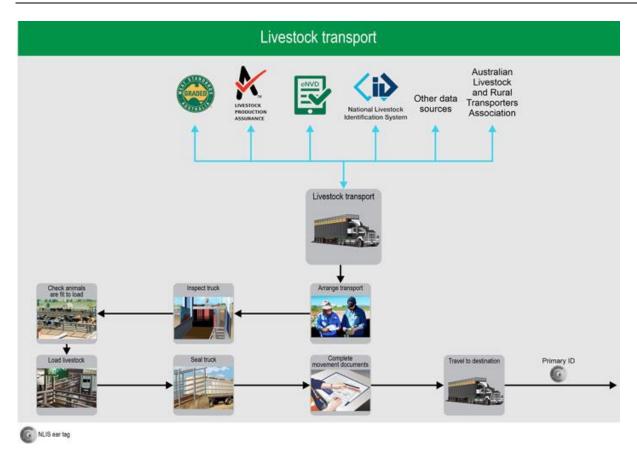


Figure 136. Inputs and outputs of the beef supply chain livestock transport sector.

5.2.4.1.1 Physical Inputs including Critical Tracking Events (CTEs)

There are few physical inputs for the transportation of livestock. Inputs not only include the cattle, but those materials required to ensure that animal welfare standards and guidelines are met whilst livestock are in transit.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with inputs to the livestock transport system include the receival of:

* Cattle

- * Feed supplies and supplements
- * NLIS ID tags.

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Cattle	These are bovine livestock and may include any type of cattle e.g., cull cattle, calves etc.	Commercial supply contract, Feed and water record, MSA Declaration, NFAS Agents Declaration, NFAS Delivery Docket or Form B, NLIS Movement Update, NVD, Post Sale Summary, Receipt of purchase/Tax	

Table 110. Physical inputs and associated Critical Tracking Event related documents for a beef livestock transport system.

		Invoice, State specific movement forms	
Feed supplies and supplements	These are supplementary animal feed products such as hay or silage fodder, or mineral supplements which are provided to ensure the production efficiency and health of livestock are maintained. This may also include clean drinking water e.g., where livestock are in transit or at saleyards.	Commodity Vendor Declaration (CVD), Receipt of purchase/Tax Invoice	
NLIS ID tags	These are animal identification tags with a unique number which must be attached to animal moved off a PIC for traceability purposes.	NLIS Movement Update	

5.2.4.1.2 Information Inputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). Information inputs for the movement of cattle are those related to the CTE documents and ensuring the health and welfare of the livestock themselves.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Agreement date	This is the date on which an agreement between two parties was made.	Yes	Commercial supply contract	
APVMA approval number	This is a unique number allocated to each label by the APVMA.	Yes	Commodity Vendor Declaration, NVD	For more information visit the Australian Pesticides and Veterinary Medicine Authority.
Batch number	This is a unique number which identifies products sharing certain production characteristics and is used for traceability purposes.	Yes	Commodity Vendor Declaration, NVD	

Table 111. Information inputs, Key Data Elements and Critical Tracking Event related documentation for a beef livestock transport system.

Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Feed and water record, Receipt of purchase/Tax Invoice	
Contract number	This is a unique number allocated to the contract by the seller.	Yes	Commercial supply contract, Commodity Vendor Declaration	
Date	This is the date of signing or of which a record entry or transaction was made.	Yes	Commercial supply contract, Commodity Vendor Declaration, Feed and water record, MSA Declaration, NFAS Agents Declaration, NFAS Delivery Docket or Form B, NVD, Post Sale Summary, Receipt of purchase/Tax Invoice, State specific movement forms	
From PIC	The Property Identification Code from/to where the livestock or product were consigned.	Yes	Commodity Vendor Declaration, MSA Declaration, NFAS Delivery Docket or Form B, NLIS Movement Update, NVD, Post Sale Summary, State specific movement forms	For more information visit the Integrity systems website.
Movement date	The date on which livestock or other products (e.g., feed or meat products) were transported between PICs/establishments.	Yes	Commercial supply contract, Commodity Vendor Declaration, MSA Declaration, NFAS Agents Declaration, NFAS Delivery Docket or Form B, NLIS Movement Update, NVD, State specific movement forms	
Movement time	This is the time at which cattle were moved from the property (PIC) of origin. Direct consignments travelling to processors by road must be slaughtered with 48 hours of dispatch.	Yes	MSA Declaration	
MSA Declaration Serial Number	Each MSA Declaration form has a unique serial number.	Yes	MSA Declaration	For more information on MSA visit the MLA website.
MSA Licence Number	Any establishment consigning, supplying, or identifying MSA Certified Product must be	Yes	MSA Declaration, Receipt of purchase/Tax Invoice	For more information on

	registered and have a unique MSA Licence Number.			MSA visit the MLA website.
National Grower Registration Number	A unique number assigned to individuals registered with the National Grower Register, an online business register for Australian growers.	Yes	Commodity Vendor Declaration	
NFAS Accreditation Number	This is a unique number given to accredited feedlots certified under the National Feedlot Accreditation Scheme (NFAS).	Yes	NFAS Delivery Docket or Form B	For more information visit the AUS- MEAT website.
NFAS Delivery Docket Number	Each NFAS document has a unique number or identity code.	Yes	NFAS Agents Declaration	For more information visit the AUS- MEAT website.
NLIS Tag Number/RFID	All animals transported between PICs must have a permanent National Livestock Identification System tag attached. This tag has a unique animal identification number.	Yes	NLIS Movement Update	For more information visit the Integrity systems website.
NVD Serial Number	Each NVD form has a unique serial number.	Yes	NFAS Delivery Docket or Form B, NLIS Movement Update, NVD, Post Sale Summary	For more information visit the Integrity systems website.
Producer/Vendor MSA Registration Number	Producers consigning cattle to MSA markets are required to be registered and have a unique MSA Registration Number.	Yes	MSA Declaration	For more information on MSA visit the MLA website.
Product code/description	This is a unique identifier or description assigned by the seller to each product type marketed or for sale.	Yes	Commodity Vendor Declaration	
Quality Assurance Officer (QAO) Certificate Number	A unique number issued to personnel issued with a Statement of Authority for demonstrating skills for	Yes	NFAS Delivery Docket or Form B	For more information visit the AUS- MEAT website.

	compliance with meeting NFAS Rules and Standards.			
Recipient Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Feed and water record, Receipt of purchase/Tax Invoice	For more information visit the ATO website.
Seller/Supplier Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Feed and water record, Receipt of purchase/Tax Invoice	For more information visit the ATO website.
To PIC	The Property Identification Code from/to where the livestock or product were consigned.	Yes	Commodity Vendor Declaration, NLIS Movement Update, NVD, Post Sale Summary, State specific movement forms	For more information visit the Integrity systems website.
Transport registration number	The registration number of the vehicle in which the animals or product were transported. For shipments of product this will be a shipping container number.	Yes	NVD	
Treatment date	The date on which a treatment or product was applied to a unit e.g., paddock, animal, fodder etc.	Yes	Commodity Vendor Declaration, Feed and water record, NVD	

5.2.4.1.3 Physical Outputs including Critical Tracking Events (CTEs)

Physical outputs for the transportation of cattle are limited to the cattle themselves.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with the outputs of the livestock transport system include the movement of:

* Cattle

off the property, premises, or supply chain sector.

Table 112. Physical inputs and associated Critical Tracking Event related documents for a beef livestock transport system.

Event	Description of the inputs	Critical Tracking Event (CTE) related documents (including	More
related to		electronic)	details
the inputs			

liv ar	hese are bovine vestock and may include ny type of cattle e.g., ull cattle, calves etc.	Commercial supply contract, Feed and water record, MSA Declaration, NFAS Agents Declaration, NFAS Delivery Docket or Form B, NLIS Movement Update, NVD, Post Sale Summary, Receipt of purchase/Tax Invoice, State specific movement forms	
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5.2.4.1.4 Information Outputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). Information outputs related to livestock transport include that pertaining to the livestock themselves such as the NLIS ID tag number and any information to be passed on from feed and water records, as well as all other documents critical to the traceability of livestock movements.

Table 113. Information inputs, Key Data Elements and Critical Tracking Event related documentation for a beef livestock transport system.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Agreement date	This is the date on which an agreement between two parties was made.	Yes	Commercial supply contract	
APVMA approval number	This is a unique number allocated to each label by the APVMA.	Yes	NVD	For more information visit the Australian Pesticides and Veterinary Medicine Authority.
Batch number	This is a unique number which identifies products sharing certain production characteristics and is used for traceability purposes.	Yes	NVD	
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Feed and water record, Receipt of purchase/Tax Invoice	
Contract number	This is a unique number allocated to the contract by the seller.	Yes	Commercial supply contract	
Date	This is the date of signing or of which a record entry or transaction was made.	Yes	Commercial supply contract, Feed and water record, MSA Declaration, NFAS Agents Declaration, NFAS Delivery Docket or Form B, NVD, Post	

			Sale Summary, Receipt of purchase/Tax Invoice, State specific movement forms	
From PIC	The Property Identification Code from/to where the livestock or product were consigned.	Yes	MSA Declaration, NFAS Delivery Docket or Form B, NLIS Movement Update, NVD, Post Sale Summary, State specific movement forms	For more information visit the Integrity systems website.
Movement date	The date on which livestock or other products (e.g., feed or meat products) were transported between PICs/establishments.	Yes	Commercial supply contract, MSA Declaration, NFAS Agents Declaration, NFAS Delivery Docket or Form B, NLIS Movement Update, NVD, State specific movement forms	
Movement time	This is the time at which cattle were moved from the property (PIC) of origin. Direct consignments travelling to processors by road must be slaughtered with 48 hours of dispatch.	Yes	MSA Declaration	
MSA Declaration Serial Number	Each MSA Declaration form has a unique serial number.	Yes	MSA Declaration	For more information on MSA visit the MLA website.
MSA Licence Number	Any establishment consigning, supplying, or identifying MSA Certified Product must be registered and have a unique MSA Licence Number.	Yes	MSA Declaration, Receipt of purchase/Tax Invoice	<u>For more</u> <u>information on</u> <u>MSA visit the</u> <u>MLA website.</u>
NFAS Accreditation Number	This is a unique number given to accredited feedlots certified under the National Feedlot Accreditation Scheme (NFAS).	Yes	NFAS Delivery Docket or Form B	For more information visit the AUS- MEAT website.
NFAS Delivery Docket Number	Each NFAS document has a unique number or identity code.	Yes	NFAS Agents Declaration	For more information visit the AUS- MEAT website.
NLIS Tag Number/RFID	All animals transported between PICs must have a permanent National Livestock Identification System tag	Yes	NLIS Movement Update	For more information visit the Integrity

	attached. This tag has a unique animal identification number.			<u>systems</u> <u>website.</u>
NVD Serial Number	Each NVD form has a unique serial number.	Yes	NFAS Delivery Docket or Form B, NLIS Movement Update, NVD, Post Sale Summary	For more information visit the Integrity systems website.
Producer/Vendor MSA Registration Number	Producers consigning cattle to MSA markets are required to be registered and have a unique MSA Registration Number.	Yes	MSA Declaration	For more information on MSA visit the MLA website.
Quality Assurance Officer (QAO) Certificate Number	A unique number issued to personnel issued with a Statement of Authority for demonstrating skills for compliance with meeting NFAS Rules and Standards.	Yes	NFAS Delivery Docket or Form B	For more information visit the AUS- MEAT website.
Recipient Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Feed and water record, Receipt of purchase/Tax Invoice	For more information visit the ATO website.
Seller/Supplier Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Feed and water record, Receipt of purchase/Tax Invoice	For more information visit the ATO website.
To PIC	The Property Identification Code from/to where the livestock or product were consigned.	Yes	NLIS Movement Update, NVD, Post Sale Summary, State specific movement forms	For more information visit the Integrity systems website.
Transport registration number	The registration number of the vehicle in which the animals or product were transported. For shipments of product this will be a shipping container number.	Yes	NVD	
Treatment date	The date on which a treatment or product was applied to a unit e.g., paddock, animal, fodder etc.	Yes	Feed and water record, NVD	

5.2.4.1.5 Regulatory and Industry Programs

- * Australian Livestock and Rural Transporters Association (ALRTA)
- * eNVD
- * Livestock Production Assurance (LPA)
- * Meat Standards Australia (MSA)
- * National Livestock Identification System (NLIS)
- * Other data sources

5.2.4.1.6 Supply Chain Node Traceability

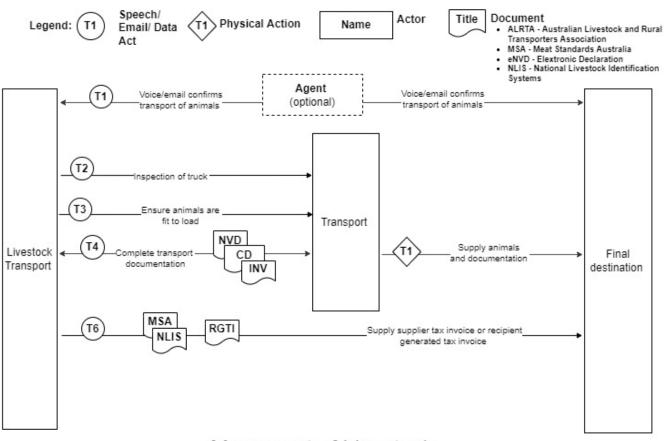
The National Livestock Identification System (NLIS) is the Australian livestock traceability program which is administered by Integrity Systems Company (ISC). Where stipulated by State legislation and certain export markets, the NLIS system requires all animals bought, sold, and moved along the supply chain to be tagged with an accredited NLIS ID tag. Each tag has an NLIS tag number or Radio Frequency Identifier (RFID) for the traceability of the animal throughout its lifetime. Every property which holds livestock must have a Property Identification Code (PIC) to which the livestock are assigned in the NLIS Database. Each time livestock are transferred between PICs within Australia they must be accompanied by a livestock movement declaration, such as the National Vendor Declaration (NVD) form. This document typically outlines the transporter details, consignment details, compliance with intended market specifications, withholding periods, and the details of the new property PIC. All livestock movements between PICs require an NLIS movement update to be made by either or both the consigner and receiver. Where NLIS ID tags are lost livestock must be issued with a new post-breeder tag if not on the PIC of birth and this reconciled in the NLIS Database.

5.2.4.1.7 Data flow diagrams

Direction	Description
Input	Details of movement of livestock
Output	Details of movement of livestock

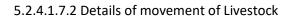
Table 114. Data flow diagrams for the inputs and outputs of a beef livestock transport system.

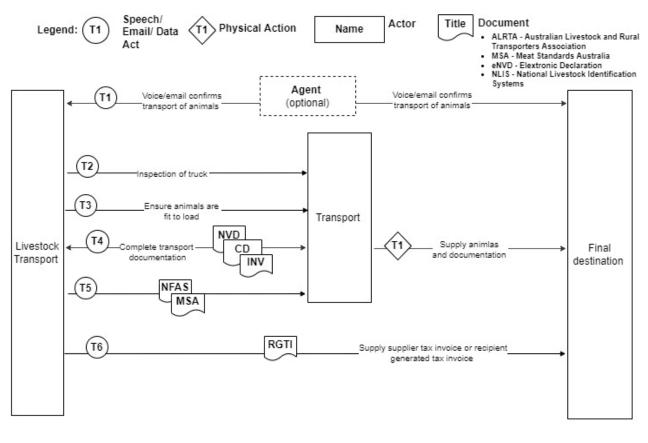
5.2.4.1.7.1 Details of movement of Livestock



Movement of Livestock

Figure 137. Data or information flows of movements of livestock in the beef supply chain.





Livestock Transport

Figure 138. Data or information flows of livestock transport in the beef supply chain.

5.2.4.2 Refrigerated transport

Refrigerated transport involves the movement (including loading and unloading) of meat and meat products from one premises to another under conditions that ensure that product integrity and wholesomeness are maintained. Ensuring that adequate hygiene and temperature controls are complied with is integral to successful refrigerated transport. Product may be in carcase, cartoned, or palletised form and must be accompanied by Critical Tracking Event related documents such as the Meat Transfer Certificate (MTC).

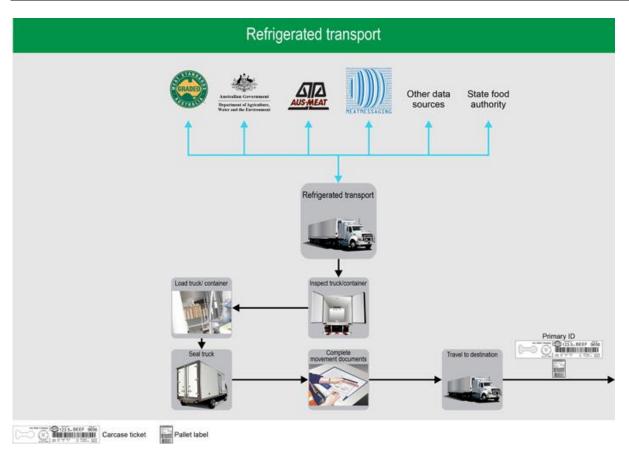


Figure 139. Inputs and outputs of the beef supply chain refrigerated transport sector.

5.2.4.2.1 Physical Inputs including Critical Tracking Events (CTEs)

Meat and meat products may be transported between various establishments such as cold stores, independent boning rooms, value adding facilities and retailing premises, as well as to exporting facilities. Therefore, the physical inputs to the refrigerated transport process may take various forms including product in carcase, carton or palletised form or product packed into shipping containers ready for export.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with inputs to the refrigerated transport system include the receival of:

- * Carcase
- * Carton
- * Pallet
- * Container System Unit (meat and meat products).

Table 115. Physical inputs and associated Critical Tracking Event related documents for a beef refrigerated transport system.					
Event related	Description of the inputs	Critical Tracking Event (CTE) related documents	Μ		

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Carcase	The body of a slaughtered animal after bleeding. Becomes a dressed carcase	Carcase Ticket, Delivery Docket/Manifest, Meat Transfer Certificate (MTC), MSA Carcase Ticket, Receipt of purchase/Tax Invoice	

	when hide, head, feet and offal are removed.		
Carton	This is a case, crate, or barrel of product.	Carton label, Delivery Docket/Manifest, Meat Transfer Certificate (MTC), Official seal, Receipt of purchase/Tax Invoice	
Pallet	A logistic unit which includes a number of cartons or goods items packed together for transport or storage purposes.	Bill of lading/Air Waybill, Delivery Docket/Manifest, Export Health Certificate, Export Permit, Meat Transfer Certificate (MTC), Receipt of purchase/Tax Invoice, Certificate of Analysis (COA), SSCC/Pallet label	
Container System Unit (meat and meat products)	A container designed for use as a unit of cargo handling equipment in the transport of goods by aircraft or ship.	Bill of lading/Air Waybill, Delivery Docket/Manifest, Export Health Certificate, Export Permit, Meat Messaging Consignment Report, Meat Transfer Certificate (MTC), Official seal, Certificate of Analysis (COA), Receipt of purchase/Tax Invoice	

5.2.4.2.2 Information Inputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). Transport of product between establishments is a Critical Tracking Event. Therefore, the KDEs here can largely be found on transportation documentation such as the Bill of lading/Air Waybill, Meat Transfer Certificate (MTC), Export Health Certificate and Certificate of Analysis. Other documentation such as carcase tickets or carton/pallet labels will also contain KDEs.

Table 116. Information inputs, Key Data Elements and Critical Tracking Event related documentation for a beef refrigerated transport system.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Analysis Date	This is the date on which a product sample was analysed.	Yes	Certificate of Analysis (COA)	
Bill of lading/Air Waybill document number	A unique document number issued for traceability purposes.	Yes	Bill of lading/Air Waybill, Certificate of Analysis (COA)	
Body number	This is a number assigned to each carcase by the processor for identification purposes.	Yes	Carcase Ticket	
Certificate of Analysis number	A unique certificate number issued for traceability purposes.	Yes	Certificate of Analysis (COA)	

COA test lot	This is a unique identifier	Yes	Certificate of Analysis	
identifier	allocated to all cartons, pallets, and shipping containers for which an analysis sample represents.	Tes	(COA)	
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Bill of lading/Air Waybill, Carton label, Certificate of Analysis (COA), Receipt of purchase/Tax Invoice, SSCC/Pallet label	
Consignment Serial Shipping Container Code (SSCC)	Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., shipment/message that is assigned by the establishment constructing the unit. The SSCC remains the same for the life of the logistic unit.	Yes	Bill of lading/Air Waybill, Meat Messaging Consignment Report, Meat Transfer Certificate (MTC), SSCC/Pallet label	
Contract number	This is a unique number allocated to the contract by the seller.	Yes	Delivery Docket/Manifest	
Count of Pallets	This is the number of pallets in the logistic unit e.g., container system unit.	Yes	Meat Messaging Consignment Report	
Count of Trade Items	Usually encoded in the GS1 barcode, this is the number of trade items e.g., cartons in the logistic unit.	Yes	Bill of lading/Air Waybill, Delivery Docket/Manifest, Meat Messaging Consignment Report, SSCC/Pallet label	
Date	This is the date of signing or of which a record entry or transaction was made.	Yes	Bill of lading/Air Waybill, Certificate of Analysis (COA), Delivery Docket/Manifest, Meat Messaging Consignment Report, Meat Transfer Certificate (MTC), Receipt of purchase/Tax Invoice	
Delivery Docket/Manifest number	This is a unique number allocated to the docket for identification purposes.	Yes	Delivery Docket/Manifest	
Export Health Certificate Number	A unique number allocated to the health certificate issued for the export consignment for traceability purposes.	Yes	Export Health Certificate, Meat Messaging Consignment Report	For more information visit the Australian Government Federal

				Register of Legislation.
Export Permit Number	A unique permit number is allocated for the export consignment following submission of a correct and validated Request For Permit (RFP) which is then approved by the Secretary.	Yes	Export Permit	For more information visit the Australian Government Federal Register of Legislation.
From Establishment number	A number issued by Federal and State Authorities to identify the originating site from which meat or meat products were distributed to domestic or export markets. For transfer certificates, the Establishment numbers for both the dispatching and receiving establishments are recorded.	Yes	Carcase Ticket, Carton label, Certificate of Analysis (COA), Delivery Docket/Manifest, Export Health Certificate, Meat Messaging Consignment Report, Meat Transfer Certificate (MTC), SSCC/Pallet label	
Global Trade Item Number (GTIN)	Encoded in the GS1 barcode, the GTIN is a globally unique 14-digit number used to identify trade items, products, or services.	Yes	Carcase Ticket, Carton label, Meat Messaging Consignment Report, SSCC/Pallet label	For more information visit the GS1 website.
GTIN of Contained Trade Items	Encoded in the GS1 barcode, the GTIN of the contained trade items is a globally unique 14-digit number used to identify trade items, products, or services in the logistic unit.	Yes	SSCC/Pallet label	For more information visit the GS1 website.
Lot number	A lot is a number assigned by the processor to each group of cattle consigned to slaughter and is usually vendor specific.	Yes	Carcase Ticket	
Movement date	The date on which livestock or other products (e.g., feed or meat products) were transported between PICs/establishments.	Yes	Bill of lading/Air Waybill, Certificate of Analysis (COA), Delivery Docket/Manifest, Export Health Certificate, Meat Transfer Certificate (MTC)	
MSA eating quality group/grade	This identifies carcases with similar MSA and eating quality grades, these may align with brands packed by the processor for logistic simplicity. Carcases are	Yes	MSA Carcase Ticket	For more information on MSA visit the MLA website.

	grouped for boning according to eating quality grades.			
MSA Licence Number	Any establishment consigning, supplying, or identifying MSA Certified Product must be registered and have a unique MSA Licence Number.	Yes	Receipt of purchase/Tax Invoice	For more information on MSA visit the MLA website.
Net Weight (Kilograms)	Usually encoded in the GS1 barcode, the Net Weight is a variable measure of the trade item e.g., carton, pallet or shipment recorded in kilograms.	Yes	Bill of lading/Air Waybill, Carcase Ticket, Carton label, Export Health Certificate, Meat Messaging Consignment Report, SSCC/Pallet label	For more information visit the GS1 website.
Official mark	Any stamp, seal, label, or mark that is declared by the regulations to be an official mark. An official mark signifies that the product has been inspected by and approved as safe for human consumption by an Authorised Officer.	Yes	Carcase Ticket, Carton label, SSCC/Pallet label	For more information visit the Australian Government Federal Register of Legislation.
Order date	This is the date on which the purchase order or contract was raised by the buyer.	Yes	Delivery Docket/Manifest	
Packaging Date	Encoded in the GS1 barcode, the Packaging Date is the date on which the item was packaged and is recorded in the format year, month, day (YYMMDD).	Yes	Carton label, Certificate of Analysis (COA), SSCC/Pallet label	For more information visit the GS1 website.
Trade description	This is a collective set of words that says what the product is and may include information such as species, net weight of product, name and address of establishments, category ciphers, market endorsements, MSA eating quality etc.	Yes	Carcase Ticket, Carton label, Delivery Docket/Manifest, Export Health Certificate, Meat Messaging Consignment Report, Meat Transfer Certificate (MTC), SSCC/Pallet label	
Packaging Date Range	This includes the oldest and newest packaging dates for the logistic unit.	Yes	SSCC/Pallet label	For more information visit the GS1 website.

Pallet Serial Shipping Container Code (SSCC)	Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., pallet that is assigned by the establishment constructing the unit. The SSCC remains the same for the life of the logistic unit.	Yes	Meat Messaging Consignment Report, Meat Transfer Certificate (MTC), SSCC/Pallet label	For more information visit the GS1 website.
Production Date (YYMMDD)	Encoded in the GS1 barcode, this is the 'kill' or slaughter' date of the product and is recorded in the format year, month, day (YYMMDD).	Yes	Carcase Ticket, Certificate of Analysis (COA), Meat Transfer Certificate (MTC)	For more information visit the GS1 website.
Recipient Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Receipt of purchase/Tax Invoice	For more information visit the ATO website.
Seal Serial Number	This is a unique serial number printed on any tamper-evident seal issued by the Department.	Yes	Bill of lading/Air Waybill, Meat Transfer Certificate (MTC), Official seal	For more information visit the GS1 website.
Seller/Supplier Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Receipt of purchase/Tax Invoice	For more information visit the ATO website.
Serial Number	Encoded in the GS1 barcode, this is a code, numeric or alphanumeric, assigned to an individual instance of an item for its lifetime.	Yes	Carcase Ticket, Carton label	For more information visit the GS1 website.
Shipping Mark	Also known as a port mark, this is a code comprising of three letters representing the foreign establishment number and the last nine digits of the consignment SSCC.	Yes	Bill of lading/Air Waybill, Certificate of Analysis (COA), Delivery Docket/Manifest, Export Health Certificate, Meat Messaging Consignment Report, SSCC/Pallet label	
To Establishment number	A number issued by Federal and State Authorities to identify the originating site from which meat or meat products were distributed to domestic or export markets. For transfer certificates, the Establishment numbers for both	Yes	Meat Transfer Certificate (MTC)	

	the dispatching and receiving establishments are recorded.			
Transfer Certificate number	A unique certificate number issued for traceability purposes.	Yes	Meat Messaging Consignment Report, Meat Transfer Certificate (MTC)	For more information visit the Department of Agriculture, Water and the Environment website.
Transport registration number	The registration number of the vehicle in which the animals or product were transported. For shipments of product this will be a shipping container number.	Yes	Bill of lading/Air Waybill, Delivery Docket/Manifest, Export Health Certificate, Meat Messaging Consignment Report, Meat Transfer Certificate (MTC)	

5.2.4.2.3 Physical Outputs including Critical Tracking Events (CTEs)

As the refrigerated transportation process involves the movement of product between establishments, the physical outputs are the same as for the physical inputs. This may include product in carcase, carton or palletised form or product packed into shipping containers ready for export.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with the outputs of the refrigerated transport system include the movement of:

- * Carcase
- * Carton
- * Pallet

* Container System Unit (meat and meat products)

off the property, premises, or supply chain sector.

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Carcase	The body of a slaughtered animal after bleeding. Becomes a dressed carcase when hide, head, feet and offal are removed.	Carcase Ticket, Delivery Docket/Manifest, Meat Transfer Certificate (MTC), MSA Carcase Ticket, Receipt of purchase/Tax Invoice	

Table 117. Physical outputs and associated Critical Tracking Event related documents for a beef refrigerated transport system.

Carton	This is a case, crate, or barrel of product.	Carton label, Delivery Docket/Manifest, Meat Transfer Certificate (MTC), Official seal, Receipt of purchase/Tax Invoice	
Pallet	A logistic unit which includes a number of cartons or goods items packed together for transport or storage purposes.	Bill of lading/Air Waybill, Delivery Docket/Manifest, Export Health Certificate, Export Permit, Meat Transfer Certificate (MTC), Receipt of purchase/Tax Invoice, Certificate of Analysis (COA), SSCC/Pallet label	
Container System Unit (meat and meat products)	A container designed for use as a unit of cargo handling equipment in the transport of goods by aircraft or ship.	Bill of lading/Air Waybill, Delivery Docket/Manifest, Export Health Certificate, Export Permit, Meat Messaging Consignment Report, Meat Transfer Certificate (MTC), Official seal, Certificate of Analysis (COA), Receipt of purchase/Tax Invoice	

5.2.4.2.4 Information Outputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). Transport of product between establishments is a Critical Tracking Event. Therefore, the KDEs here can largely be found on transportation documentation such as the Bill of lading/Air Waybill, Meat Transfer Certificate (MTC), Export Health Certificate and Certificate of Analysis. Other documentation such as carcase tickets or carton/pallet labels will also contain KDEs.

Table 118. Information outputs, Key Data Elements and Critical Tracking Event related documentation for a beef refrigerated transport system.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Analysis Date	This is the date on which a product sample was analysed.	Yes	Certificate of Analysis (COA)	
Bill of lading/Air Waybill document number	A unique document number issued for traceability purposes.	Yes	Bill of lading/Air Waybill, Certificate of Analysis (COA)	
Body number	This is a number assigned to each carcase by the processor for identification purposes.	Yes	Carcase Ticket	
Certificate of Analysis number	A unique certificate number issued for traceability purposes.	Yes	Certificate of Analysis (COA)	
COA test lot identifier	This is a unique identifier allocated to all cartons, pallets, and shipping containers for which an analysis sample represents.	Yes	Certificate of Analysis (COA)	

Company/product	This is an in-house code for the	Yes	Bill of lading/Air Waybill,	
code	identification of the product in the unit.		Carton label, Certificate of Analysis (COA), Receipt of purchase/Tax Invoice, SSCC/Pallet label	
Consignment Serial Shipping Container Code (SSCC)	Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., shipment/message that is assigned by the establishment constructing the unit. The SSCC remains the same for the life of the logistic unit.	Yes	Bill of lading/Air Waybill, Meat Messaging Consignment Report, Meat Transfer Certificate (MTC), SSCC/Pallet label	For more information visit the GS1 website.
Contract number	This is a unique number allocated to the contract by the seller.	Yes	Delivery Docket/Manifest	
Count of Trade Items	Usually encoded in the GS1 barcode, this is the number of trade items e.g., cartons in the logistic unit.	Yes	Bill of lading/Air Waybill, Delivery Docket/Manifest, Meat Messaging Consignment Report, SSCC/Pallet label	For more information visit the GS1 website.
Date	This is the date of signing or of which a record entry or transaction was made.	Yes	Bill of lading/Air Waybill, Certificate of Analysis (COA), Delivery Docket/Manifest, Meat Messaging Consignment Report, Meat Transfer Certificate (MTC), Receipt of purchase/Tax Invoice	
Delivery Docket/Manifest number	This is a unique number allocated to the docket for identification purposes.	Yes	Delivery Docket/Manifest	
Export Health Certificate Number	A unique number allocated to the health certificate issued for the export consignment for traceability purposes.	Yes	Export Health Certificate, Meat Messaging Consignment Report	For more information visit the Australian Government Federal Register of Legislation.
Export Permit Number	A unique permit number is allocated for the export consignment following submission of a correct and validated Request For Permit (RFP) which is then approved by the Secretary.	Yes	Export Permit	For more information visit the Australian Government Federal

				Register of Legislation.
From Establishment number	A number issued by Federal and State Authorities to identify the originating site from which meat or meat products were distributed to domestic or export markets. For transfer certificates, the Establishment numbers for both the dispatching and receiving establishments are recorded.	Yes	Carcase Ticket, Carton label, Certificate of Analysis (COA), Delivery Docket/Manifest, Export Health Certificate, Meat Messaging Consignment Report, Meat Transfer Certificate (MTC), SSCC/Pallet label	
Global Trade Item Number (GTIN)	Encoded in the GS1 barcode, the GTIN is a globally unique 14-digit number used to identify trade items, products, or services.	Yes	Carcase Ticket, Carton label, Meat Messaging Consignment Report, SSCC/Pallet label	For more information visit the GS1 website.
GTIN of Contained Trade Items	Encoded in the GS1 barcode, the GTIN of the contained trade items is a globally unique 14-digit number used to identify trade items, products, or services in the logistic unit.	Yes	SSCC/Pallet label	For more information visit the GS1 website.
Lot number	A lot is a number assigned by the processor to each group of cattle consigned to slaughter and is usually vendor specific.	Yes	Carcase Ticket	
Movement date	The date on which livestock or other products (e.g., feed or meat products) were transported between PICs/establishments.	Yes	Bill of lading/Air Waybill, Certificate of Analysis (COA), Delivery Docket/Manifest, Export Health Certificate, Meat Transfer Certificate (MTC)	
MSA eating quality group/grade	This identifies carcases with similar MSA and eating quality grades, these may align with brands packed by the processor for logistic simplicity. Carcases are grouped for boning according to eating quality grades.	Yes	MSA Carcase Ticket	For more information on MSA visit the MLA website.
MSA Licence Number	Any establishment consigning, supplying, or identifying MSA Certified Product must be registered and have a unique MSA Licence Number.	Yes	Receipt of purchase/Tax Invoice	For more information on MSA visit the MLA website.

Net Weight (Kilograms)	Usually encoded in the GS1 barcode, the Net Weight is a variable measure of the trade item e.g., carton, pallet or shipment recorded in kilograms.	Yes	Bill of lading/Air Waybill, Carcase Ticket, Carton label, Export Health Certificate, Meat Messaging Consignment Report, SSCC/Pallet label	For more information visit the GS1 website.
Official mark	Any stamp, seal, label, or mark that is declared by the regulations to be an official mark. An official mark signifies that the product has been inspected by and approved as safe for human consumption by an Authorised Officer.	Yes	Carcase Ticket, Carton label, SSCC/Pallet label	For more information visit the Australian Government Federal Register of Legislation.
Order date	This is the date on which the purchase order or contract was raised by the buyer.	Yes	Delivery Docket/Manifest	
Packaging Date	Encoded in the GS1 barcode, the Packaging Date is the date on which the item was packaged and is recorded in the format year, month, day (YYMMDD).	Yes	Carton label, Certificate of Analysis (COA), SSCC/Pallet label	For more information visit the GS1 website.
Packaging Date Range	This includes the oldest and newest packaging dates for the logistic unit.	Yes	SSCC/Pallet label	
Pallet Serial Shipping Container Code (SSCC)	Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., pallet that is assigned by the establishment constructing the unit. The SSCC remains the same for the life of the logistic unit.	Yes	Meat Messaging Consignment Report, Meat Transfer Certificate (MTC), SSCC/Pallet label	For more information visit the GS1 website.
Production Date (YYMMDD)	Encoded in the GS1 barcode, this is the 'kill' or slaughter' date of the product and is recorded in the format year, month, day (YYMMDD).	Yes	Carcase Ticket, Certificate of Analysis (COA), Meat Transfer Certificate (MTC)	For more information visit the GS1 website.
Recipient Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Receipt of purchase/Tax Invoice	For more information visit the ATO website.

Seal Serial Number Seller/Supplier Australian Business Number (ABN)	This is a unique serial number printed on any tamper-evident seal issued by the Department. This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Bill of lading/Air Waybill, Meat Transfer Certificate (MTC), Official seal Receipt of purchase/Tax Invoice	For more information visit the Australian Government Federal Register of Legislation.For more information visit the ATO website.
Serial Number	Encoded in the GS1 barcode, this is a code, numeric or alphanumeric, assigned to an individual instance of an item for its lifetime.	Yes	Carcase Ticket, Carton label	For more information visit the GS1 website.
Shipping Mark	Also known as a port mark, this is a code comprising of three letters representing the foreign establishment number and the last nine digits of the consignment SSCC.	Yes	Bill of lading/Air Waybill, Certificate of Analysis (COA), Delivery Docket/Manifest, Export Health Certificate, Meat Messaging Consignment Report, SSCC/Pallet label	
To Establishment number	A number issued by Federal and State Authorities to identify the originating site from which meat or meat products were distributed to domestic or export markets. For transfer certificates, the Establishment numbers for both the dispatching and receiving establishments are recorded.	Yes	Meat Transfer Certificate (MTC)	
Trade description	This is a collective set of words that says what the product is and may include information such as species, net weight of product, name and address of establishments, category ciphers, market endorsements, MSA eating quality etc.	Yes	Carcase Ticket, Carton label, Delivery Docket/Manifest, Export Health Certificate, Meat Messaging Consignment Report, Meat Transfer Certificate (MTC), SSCC/Pallet label	
Transfer Certificate number	A unique certificate number issued for traceability purposes.	Yes	Meat Messaging Consignment Report, Meat Transfer Certificate (MTC)	For more information visit the Department of Agriculture, Water and the

				Environment website.
Transport registration number	The registration number of the vehicle in which the animals or product were transported. For shipments of product this will be a shipping container number.	Yes	Bill of lading/Air Waybill, Delivery Docket/Manifest, Export Health Certificate, Meat Messaging Consignment Report, Meat Transfer Certificate (MTC)	

- 5.2.4.2.5 Regulatory and Industry Programs
- * AUS-MEAT
- * Department of Agriculture
- * Meat Messaging
- * Meat Standards Australia (MSA)
- * Other data sources
- * State food authority

5.2.4.2.6 Supply Chain Node Traceability

The traceability of product undergoing refrigerated transport back to the live animal and property of origin is dependent on the form in which the product is being transported.

For carcases, traceability back to the live animal is possible and can be done by the processing establishment where the animal was slaughtered. Here, carcases are issued a carcase ticket which correlates to the live animal identifier and contains key information, including GS1 meat industry barcode, body number, processing establishment number and production date or 'kill date'. This information is uploaded to the NLIS Database, by the processor, under the processing establishments Property Identification Code (PIC). Thus, there is the potential to trace whole carcases undergoing refrigerated transport back to the individual live animal and property of origin.

For cartoned and palletised product, each identified by unique serialised carton or product labels respectively, including a GS1 meat industry barcode, traceability is limited to the carcases that have entered the boning room for the production run of cartons that were created. For example, 200 carcases (400 sides) individually identified with unique carcase tickets enter the boning room for a specific boning run. These carcase tickets are linked to the specific boning run. From these carcases, 3 200 cartons of primal cuts and 1 000 cartons of trim and other highly mixed products are created. While all cartons are identified with unique serialised carton labels linked to the boning run (and may be packaged into pallets containing unique serialised pallet labels including a GS1 SSCC barcode), it is not readily possible to identify which carcases are in which cartons as the cartons will contain meat products from different carcases. If the carcases were sourced from several different properties, the resulting carton can only be traced to a number of possible carcases and source properties. In logistical systems such as transport and cold stores, cartons are typically processed by pallets with only the pallet label being scanned. Therefore, traceability through logistics is often at the pallet level.

All meat product transferred between establishments must be accompanied by a Meat Transfer Certificate (MTC) which details the serialised logistic unit identifiers such as the Serial Shipping Container Code (SSCC). This allows traceability of the unit and its subunits back to either the live animal and property of origin (for carcases) or the boning room production run (for cartons and pallets).

5.2.4.2.7 Data flow diagrams

Direction	Description
Input	Load Instruction/Run sheet to Transport
Output	Delivery Receipt to Receiving party

Table 119. Data flow diagrams for the inputs and outputs of a beef refrigerated transport system.

5.2.4.2.7.1 Load Instruction/Run Sheet to Transport

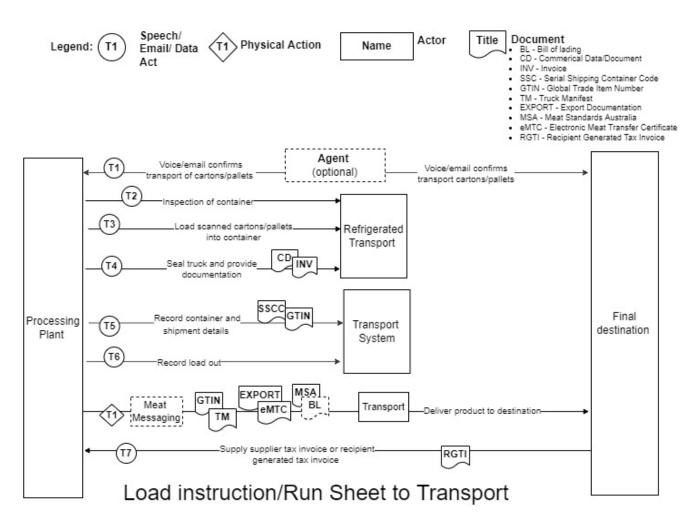
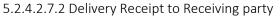


Figure 140. Data or information flows from the load instruction to the transport system in the beef supply chain.



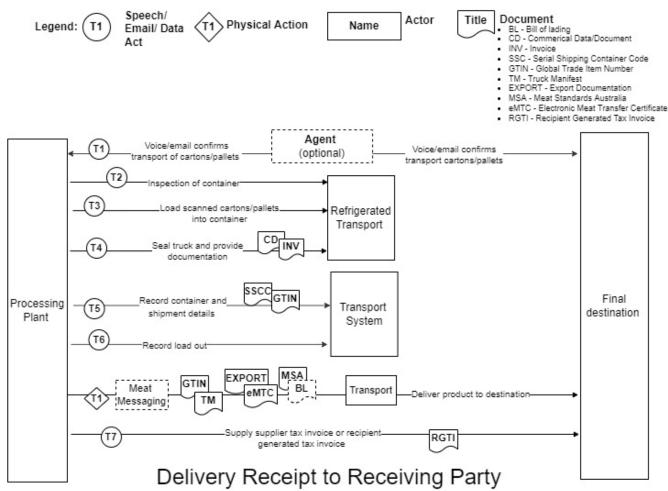
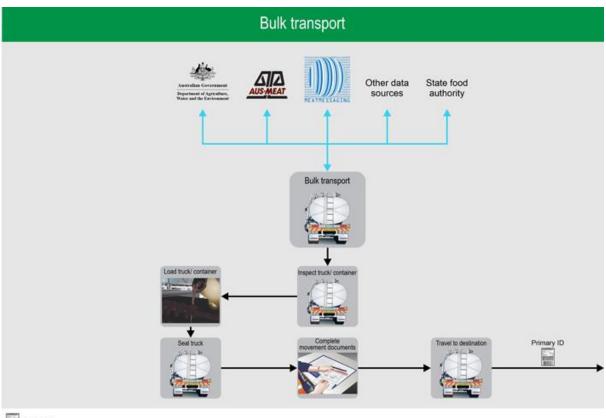


Figure 141. Data or information flows from the delivery of receipt to receiving party within the beef supply chain.

5.2.4.3 Bulk transport

Bulk transport involves the movement (including loading and unloading) of by-products (from render) or hides from one premises to another. These labelled products are typically transported to export ports where they are assembled and loaded for export via ship or airfreight. By-products and hides are subsequently manufactured into leather, feed, fertilizer, and pharmaceutical products for commercial distribution. All bulk transport movements must be accompanied by Critical Tracking Event related documents such as the Animal By Product Transfer Certificate (BPTC).



Pallet label

Figure 142. Inputs and outputs of the beef supply chain bulk transport sector.

5.2.4.3.1 Physical Inputs including Critical Tracking Events (CTEs)

Physical inputs into the bulk transport system may include animal by products from rendering or hide processing facilities. Documentation required to accompany such product is largely similar to that of product approved for human consumption. However, documents pertaining explicitly to product consumption i.e., edible/inedible, are replaced here by alternative regulated documentation. For example, as bulk transport product is inedible the Meat Transfer Certificate is replaced by an Animal By Product Transfer Certificate (BPTC) for non-prescribed goods.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with inputs to the bulk transport system include the receival of:

- * Rendered product store bag
- * Pallet
- * Container System Unit (render and hide product).

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Rendered product store bag	A large storage bag which can temporarily store large quantities of product.	Animal By Product Transfer Certificate (BPTC), Bill of lading/Air Waybill, Certificate of Analysis (COA), Delivery Docket/Manifest, Export clearance documentation, Export Permit, Receipt of purchase/Tax Invoice, SSCC/Store bag label	
Pallet	A logistic unit which includes a number of cartons or goods items packed together for transport or storage purposes.	Animal By Product Transfer Certificate (BPTC), Bill of lading/Air Waybill, Certificate of Analysis (COA), Delivery Docket/Manifest, Export clearance documentation, Export Permit, Receipt of purchase/Tax Invoice, SSCC/Pallet label	
Container System Unit (render and hide product)	A container designed for use as a unit of cargo handling equipment in the transport of goods by aircraft or ship.	Animal By Product Transfer Certificate (BPTC), Bill of lading/Air Waybill, Certificate of Analysis (COA), Delivery Docket/Manifest, Export clearance documentation, Export Permit, Meat Messaging Consignment Report, Receipt of purchase/Tax Invoice	

Table 120. Physical inputs and associated Critical Tracking Event related documents for a beef bulk transport system.

5.2.4.3.2 Information Inputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). The transport of product between establishments is a Critical Tracking Event. Therefore, the KDEs here can largely be found on transportation documentation such as the Bill of lading/Air Waybill, Animal By Product Transfer Certificate (BPTC), Export clearance documentation and Certificate of Analysis. Other documentation such as Receipts of purchase/Tax Invoices and store bag or pallet labels will also contain KDEs.

Table 121. Information inputs, Key Data Elements and Critical Tracking Event related documentation for a beef bulk transport system.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Analysis Date	This is the date on which a product sample was analysed.	Yes	Certificate of Analysis (COA)	
Bill of lading/Air Waybill document number	A unique document number issued for traceability purposes.	Yes	Bill of lading/Air Waybill, Certificate of Analysis (COA)	
Certificate of Analysis number	A unique certificate number issued for traceability purposes.	Yes	Certificate of Analysis (COA)	

COA test lot identifier	This is a unique identifier allocated to all cartons, pallets, and shipping containers for which an analysis sample represents.	Yes	Certificate of Analysis (COA)	
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Bill of lading/Air Waybill, Certificate of Analysis (COA), Receipt of purchase/Tax Invoice, SSCC/Pallet label, SSCC/Store bag label	
Consignment Serial Shipping Container Code (SSCC)	Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., shipment/message that is assigned by the establishment constructing the unit. The SSCC remains the same for the life of the logistic unit.	Yes	Animal By Product Transfer Certificate (BPTC), Bill of lading/Air Waybill, Export clearance documentation, Meat Messaging Consignment Report, SSCC/Pallet label, SSCC/Store bag label	For more information visit the GS1 website.
Contract number	This is a unique number allocated to the contract by the seller.	Yes	Delivery Docket/Manifest	
Count of Pallets	This is the number of pallets in the logistic unit e.g., container system unit.	Yes	Meat Messaging Consignment Report	
Count of Trade Items	Usually encoded in the GS1 barcode, this is the number of trade items e.g., cartons in the logistic unit.	Yes	Bill of lading/Air Waybill, Delivery Docket/Manifest, Meat Messaging Consignment Report, SSCC/Pallet label, SSCC/Store bag label	For more information visit the GS1 website.
Date	This is the date of signing or of which a record entry or transaction was made.	Yes	Animal By Product Transfer Certificate (BPTC), Bill of lading/Air Waybill, Certificate of Analysis (COA), Delivery Docket/Manifest, Export clearance documentation, Meat Messaging Consignment Report, Receipt of purchase/Tax Invoice	
Delivery Docket/Manifest number	This is a unique number allocated to the docket for identification purposes.	Yes	Delivery Docket/Manifest	

Export Health	A unique number allocated to	Yes	Meat Messaging	For more
Certificate Number	the health certificate issued for the export consignment for traceability purposes.		Consignment Report	information visit the Australian Government Federal Register of Legislation.
Export Permit Number	A unique permit number is allocated for the export consignment following submission of a correct and validated Request For Permit (RFP) which is then approved by the Secretary.	Yes	Export Permit	For more information visit the Australian Government Federal Register of Legislation.
From Establishment number	A number issued by Federal and State Authorities to identify the originating site from which meat or meat products were distributed to domestic or export markets. For transfer certificates, the Establishment numbers for both the dispatching and receiving establishments are recorded.	Yes	Animal By Product Transfer Certificate (BPTC), Certificate of Analysis (COA), Delivery Docket/Manifest, Export clearance documentation, Meat Messaging Consignment Report, SSCC/Pallet label, SSCC/Store bag label	
Global Trade Item Number (GTIN)	Encoded in the GS1 barcode, the GTIN is a globally unique 14-digit number used to identify trade items, products, or services.	Yes	Meat Messaging Consignment Report, SSCC/Pallet label, SSCC/Store bag label	For more information visit the GS1 website.
GTIN of Contained Trade Items	Encoded in the GS1 barcode, the GTIN of the contained trade items is a globally unique 14- digit number used to identify trade items, products, or services in the logistic unit.	Yes	SSCC/Pallet label, SSCC/Store bag label	For more information visit the GS1 website.
Movement date	The date on which livestock or other products (e.g., feed or meat products) were transported between PICs/establishments.	Yes	Animal By Product Transfer Certificate (BPTC), Bill of lading/Air Waybill, Certificate of Analysis (COA), Delivery Docket/Manifest, Export clearance documentation	
Net Weight (Kilograms)	Usually encoded in the GS1 barcode, the Net Weight is a variable measure of the trade	Yes	Bill of lading/Air Waybill, Meat Messaging Consignment Report,	For more information

	item e.g., carton, pallet or shipment recorded in kilograms.		SSCC/Pallet label, SSCC/Store bag label	visit the GS1 website.
Official mark	Any stamp, seal, label, or mark that is declared by the regulations to be an official mark. An official mark signifies that the product has been inspected by and approved as safe for human consumption by an Authorised Officer.	Yes	SSCC/Pallet label	For more information visit the Australian Government Federal Register of Legislation.
Order date	This is the date on which the purchase order or contract was raised by the buyer.	Yes	Delivery Docket/Manifest	
Packaging Date	Encoded in the GS1 barcode, the Packaging Date is the date on which the item was packaged and is recorded in the format year, month, day (YYMMDD).	Yes	Certificate of Analysis (COA), SSCC/Pallet label, SSCC/Store bag label	For more information visit the GS1 website.
Packaging Date Range	This includes the oldest and newest packaging dates for the logistic unit.	Yes	Export clearance documentation, SSCC/Pallet label, SSCC/Store bag label	
Pallet Serial Shipping Container Code (SSCC)	Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., pallet that is assigned by the establishment constructing the unit. The SSCC remains the same for the life of the logistic unit.	Yes	Animal By Product Transfer Certificate (BPTC), Export clearance documentation, Meat Messaging Consignment Report, SSCC/Pallet label, SSCC/Store bag label	For more information visit the GS1 website.
Production Date (YYMMDD)	Encoded in the GS1 barcode, this is the 'kill' or slaughter' date of the product and is recorded in the format year, month, day (YYMMDD).	Yes	Animal By Product Transfer Certificate (BPTC), Certificate of Analysis (COA)	For more information visit the GS1 website.
Recipient Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Receipt of purchase/Tax Invoice	For more information visit the ATO website.
Seal Serial Number	This is a unique serial number printed on any tamper-evident seal issued by the Department.	Yes	Animal By Product Transfer Certificate (BPTC), Bill of lading/Air Waybill,	For more information visit the GS1 website.

			Export clearance documentation	
Seller/Supplier Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Receipt of purchase/Tax Invoice	For more information visit the ATO website.
Shipping Mark	Also known as a port mark, this is a code comprising of three letters representing the foreign establishment number and the last nine digits of the consignment SSCC.	Yes	Bill of lading/Air Waybill, Certificate of Analysis (COA), Delivery Docket/Manifest, Meat Messaging Consignment Report, SSCC/Pallet label, SSCC/Store bag label	
To Establishment number	A number issued by Federal and State Authorities to identify the originating site from which meat or meat products were distributed to domestic or export markets. For transfer certificates, the Establishment numbers for both the dispatching and receiving establishments are recorded.	Yes	Animal By Product Transfer Certificate (BPTC), Export clearance documentation	
Trade description	This is a collective set of words that says what the product is and may include information such as species, net weight of product, name and address of establishments, category ciphers, market endorsements, MSA eating quality etc.	Yes	Animal By Product Transfer Certificate (BPTC), Delivery Docket/Manifest, Export clearance documentation, Meat Messaging Consignment Report, SSCC/Pallet label, SSCC/Store bag label	
Transfer Certificate number	A unique certificate number issued for traceability purposes.	Yes	Animal By Product Transfer Certificate (BPTC), Meat Messaging Consignment Report	For more information visit the Department of Agriculture, Water and the Environment website.
Transport registration number	The registration number of the vehicle in which the animals or product were transported. For shipments of product this will be a shipping container number.	Yes	Animal By Product Transfer Certificate (BPTC), Bill of lading/Air Waybill, Delivery Docket/Manifest, Export clearance documentation, Meat	

	Messaging Consignment Report
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5.2.4.3.3 Physical Outputs including Critical Tracking Events (CTEs)

Physical outputs of the bulk transport system include products (animal by products from rendering or hide processing facilities) which have been loaded into shipping containers ready for export. Documentation required to accompany such product is largely similar to that of product approved for human consumption. However, documents pertaining explicitly to product consumption i.e., edible/inedible, are replaced here by alternative regulated documentation. For example, as bulk transport product is inedible the Meat Transfer Certificate is replaced by an Animal By Product Transfer Certificate (BPTC) for non-prescribed goods.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with the outputs of the bulk transport system include the movement of:

* Container System Unit (render and hide product)

off the property, premises, or supply chain sector.

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Container System Unit (render and hide product)	A container designed for use as a unit of cargo handling equipment in the transport of goods by aircraft or ship.	Animal By Product Transfer Certificate (BPTC), Bill of lading/Air Waybill, Certificate of Analysis (COA), Delivery Docket/Manifest, Export clearance documentation, Export Permit, Meat Messaging Consignment Report, Receipt of purchase/Tax Invoice	

5.2.4.3.4 Information Outputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). The transport of product between establishments is a Critical Tracking Event. Therefore, the KDEs here can largely be found on transportation documentation such as the Bill of lading/Air Waybill, Animal By Product Transfer Certificate (BPTC), Export clearance documentation and Certificate of Analysis. Other documentation such as Receipts of purchase/Tax Invoices and store bag or pallet labels and Meat Messaging Consignment Reports will also contain KDEs.

Table 123. Information outputs, Key Data Elements and Critical Tracking Event related documentation for a beef bulk transport system.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Analysis Date	This is the date on which a product sample was analysed.	Yes	Certificate of Analysis (COA)	

Bill of lading/Air Waybill document number	A unique document number issued for traceability purposes.	Yes	Bill of lading/Air Waybill, Certificate of Analysis (COA)	
Certificate of Analysis number	A unique certificate number issued for traceability purposes.	Yes	Certificate of Analysis (COA)	
COA test lot identifier	This is a unique identifier allocated to all cartons, pallets, and shipping containers for which an analysis sample represents.	Yes	Certificate of Analysis (COA)	
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Bill of lading/Air Waybill, Certificate of Analysis (COA), Receipt of purchase/Tax Invoice	
Consignment Serial Shipping Container Code (SSCC)	Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., shipment/message that is assigned by the establishment constructing the unit. The SSCC remains the same for the life of the logistic unit.	Yes	Animal By Product Transfer Certificate (BPTC), Bill of lading/Air Waybill, Export clearance documentation, Meat Messaging Consignment Report	For more information visit the GS1 website.
Contract number	This is a unique number allocated to the contract by the seller.	Yes	Delivery Docket/Manifest	
Count of Pallets	This is the number of pallets in the logistic unit e.g., container system unit.	Yes	Meat Messaging Consignment Report	
Count of Trade Items	Usually encoded in the GS1 barcode, this is the number of trade items e.g., cartons in the logistic unit.	Yes	Bill of lading/Air Waybill, Delivery Docket/Manifest, Meat Messaging Consignment Report	For more information visit the GS1 website.
Date	This is the date of signing or of which a record entry or transaction was made.	Yes	Animal By Product Transfer Certificate (BPTC), Bill of lading/Air Waybill, Certificate of Analysis (COA), Delivery Docket/Manifest, Export clearance documentation, Meat Messaging Consignment Report, Receipt of purchase/Tax Invoice	

Delivery Docket/Manifest number	This is a unique number allocated to the docket for identification purposes.	Yes	Delivery Docket/Manifest	
Export Health Certificate Number	A unique number allocated to the health certificate issued for the export consignment for traceability purposes.	Yes	Meat Messaging Consignment Report	For more information visit the Australian Government Federal Register of Legislation.
Export Permit Number	A unique permit number is allocated for the export consignment following submission of a correct and validated Request For Permit (RFP) which is then approved by the Secretary.	Yes	Export Permit	<u>For more</u> information visit the <u>Australian</u> <u>Government</u> <u>Federal</u> <u>Register of</u> <u>Legislation.</u>
From Establishment number	A number issued by Federal and State Authorities to identify the originating site from which meat or meat products were distributed to domestic or export markets. For transfer certificates, the Establishment numbers for both the dispatching and receiving establishments are recorded.	Yes	Animal By Product Transfer Certificate (BPTC), Certificate of Analysis (COA), Delivery Docket/Manifest, Export clearance documentation, Meat Messaging Consignment Report	
Global Trade Item Number (GTIN)	Encoded in the GS1 barcode, the GTIN is a globally unique 14-digit number used to identify trade items, products, or services.	Yes	Meat Messaging Consignment Report	For more information visit the GS1 website.
Movement date	The date on which livestock or other products (e.g., feed or meat products) were transported between PICs/establishments.	Yes	Animal By Product Transfer Certificate (BPTC), Bill of lading/Air Waybill, Certificate of Analysis (COA), Delivery Docket/Manifest, Export clearance documentation	
Net Weight (Kilograms)	Usually encoded in the GS1 barcode, the Net Weight is a variable measure of the trade item e.g., carton, pallet or shipment recorded in kilograms.	Yes	Bill of lading/Air Waybill, Meat Messaging Consignment Report	For more information visit the GS1 website.

Order date	This is the date on which the purchase order or contract was raised by the buyer.	Yes	Delivery Docket/Manifest	
Packaging Date	Encoded in the GS1 barcode, the Packaging Date is the date on which the item was packaged and is recorded in the format year, month, day (YYMMDD).	Yes	Certificate of Analysis (COA)	For more information visit the GS1 website.
Packaging Date Range	This includes the oldest and newest packaging dates for the logistic unit.	Yes	Export clearance documentation	
Pallet Serial Shipping Container Code (SSCC)	Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., pallet that is assigned by the establishment constructing the unit. The SSCC remains the same for the life of the logistic unit.	Yes	Animal By Product Transfer Certificate (BPTC), Export clearance documentation, Meat Messaging Consignment Report	For more information visit the GS1 website.
Production Date (YYMMDD)	Encoded in the GS1 barcode, this is the 'kill' or slaughter' date of the product and is recorded in the format year, month, day (YYMMDD).	Yes	Animal By Product Transfer Certificate (BPTC), Certificate of Analysis (COA)	For more information visit the GS1 website.
Recipient Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Receipt of purchase/Tax Invoice	For more information visit the ATO website.
Seal Serial Number	This is a unique serial number printed on any tamper-evident seal issued by the Department.	Yes	Animal By Product Transfer Certificate (BPTC), Bill of lading/Air Waybill, Export clearance documentation	For more information visit the GS1 website.
Seller/Supplier Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Receipt of purchase/Tax Invoice	For more information visit the ATO website.
Shipping Mark	Also known as a port mark, this is a code comprising of three letters representing the foreign establishment number and the last nine digits of the consignment SSCC.	Yes	Bill of lading/Air Waybill, Certificate of Analysis (COA), Delivery Docket/Manifest, Meat Messaging Consignment Report	

To Establishment number	A number issued by Federal and State Authorities to identify the originating site from which meat or meat products were distributed to domestic or export markets. For transfer certificates, the Establishment numbers for both the dispatching and receiving establishments are recorded.	Yes	Animal By Product Transfer Certificate (BPTC), Export clearance documentation	
Trade description	This is a collective set of words that says what the product is and may include information such as species, net weight of product, name and address of establishments, category ciphers, market endorsements, MSA eating quality etc.	Yes	Animal By Product Transfer Certificate (BPTC), Delivery Docket/Manifest, Export clearance documentation, Meat Messaging Consignment Report	
Transfer Certificate number	A unique certificate number issued for traceability purposes.	Yes	Animal By Product Transfer Certificate (BPTC), Meat Messaging Consignment Report	For more information visit the Department of Agriculture, Water and the Environment website.
Transport registration number	The registration number of the vehicle in which the animals or product were transported. For shipments of product this will be a shipping container number.	Yes	Animal By Product Transfer Certificate (BPTC), Bill of lading/Air Waybill, Delivery Docket/Manifest, Export clearance documentation, Meat Messaging Consignment Report	

- 5.2.4.3.5 Regulatory and Industry Programs
- * State food authority
- * Department of Agriculture
- * AUS-MEAT
- * Meat Messaging
- * Other data sources

5.2.4.3.6 Supply Chain Node Traceability

The traceability of rendered and hide product, that is bulk transported, back to the live animal and property of origin is operationally impractical. This is because rendered and hide products are bulk processed and packaged from any given processing day or number of processing days. While this means that the production date or kill

date of animals from which hides or rendered product is likely to be known, any batch of product being packaged into store bags or pallets with unique serialised labels is only traceable to any number of cattle or source properties.

For example, hides or product for render which make up one batch come from a total of 6 plant kill day combinations. For each processing day 800 animals, sourced from 8 different properties are slaughtered and the unique serialised NLIS ID tag numbers known for each animal as well as that of the corresponding carcase ticket. With render or hide products from these processing days being processed and packaged in one batch, the unique serialised identifiers of output products can be linked only to that batch and the processing dates from which product was obtained. This means that one batch is comprised of any of 4 800 source animals that were supplied by any of 48 source properties.

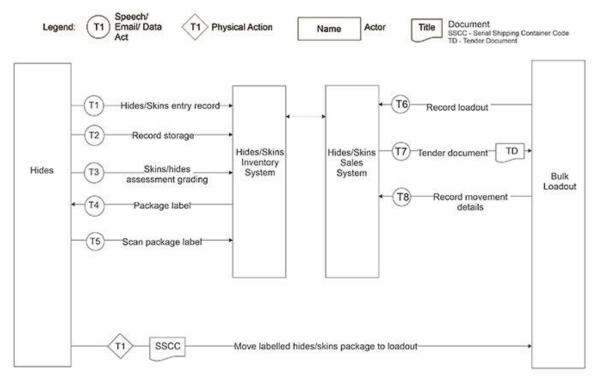
All bulk transported products must be accompanied by a Meat Messaging Consignment Report and an Animal By Product Transfer Certificate (BPTC). The Consignment Report is issued to the buyer of product and lists all the logistic unit and subunit unique serialised identifiers contained within the Container System Unit to be exported including the Consignment Serial Shipping Container Code (SSCC), Pallet Serial Shipping Container Code, and scanned and verified carton label serial identifiers. Additionally, the Transfer Certificate details the serialised logistic unit identifiers such as the Serial Shipping Container Code (SSCC). These documents allow traceability of the unit and its subunits back to any number of cattle or source properties.

5.2.4.3.7 Data flow diagrams

Direction	Description
Input	Hides to Bulk loadout
Input	Tallow to Bulk loadout
Input	Meat meal to Bulk loadout

Table 124. Data flow diagrams for the inputs and outputs of a beef bulk transport system.

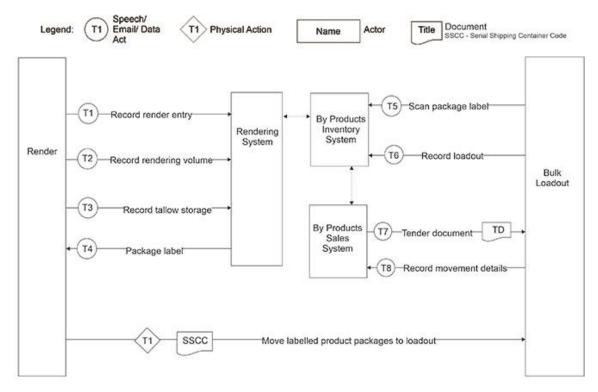
5.2.4.3.7.1 Hides to Bulk loadout



Hides to Bulk Loadout

Figure 143. Data or information flows from the hides to bulk loadout systems in the beef supply chain.

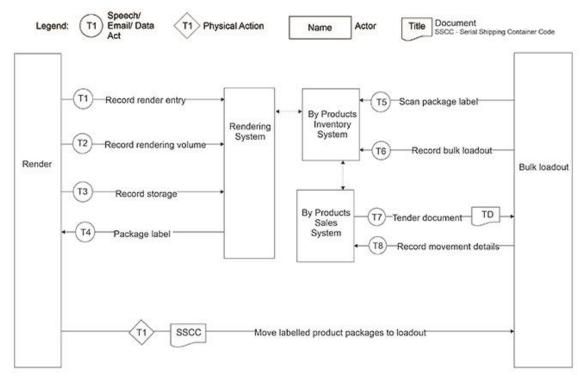
5.2.4.3.7.2 Tallow to Bulk loadout



Tallow to Bulk Loadout

Figure 144. Data or information flows from the tallow to bulk loadout systems in the beef supply chain.

5.2.4.3.7.3 Meat meal to Bulk loadout



Meat Meal to Bulk Loadout

Figure 145. Data or information flows from the meat meal to bulk loadout systems in the beef supply chain.

5.2.5 International Trade

5.2.5.1 Live export

Once livestock have completed feeding regiments, they are either sent to slaughter, with product being distributed domestically or exported or sent overseas by boat or airfreight in a process known as live exporting. Australia is one of the world leaders in animal welfare practices and these are ensured through strict standards and regulations that are applied throughout the live animal value chain, including the live export process. As a result, these standards ensure that animals are delivered to the import destination in as best condition as possible.

The live export process is made up of pre-export planning, export, and discharge of the animals at their final destination. Pre-export planning includes government approval for export to an export destination, an approved loading plan, vendor declarations, inspections of the vessel by AQIS (Australian Quarantine and Inspection Service), licensing, inspection of animals both by veterinarians, AQIS, and a stock inspector, export approval, and meeting the requirements for both stockman and veterinarian onboard. The livestock are prepared for transport, assembled to embark, and loaded into the vessel (either ship or plane) for export. Upon arrival, the animals are inspected and signed off on their health before being unloaded.

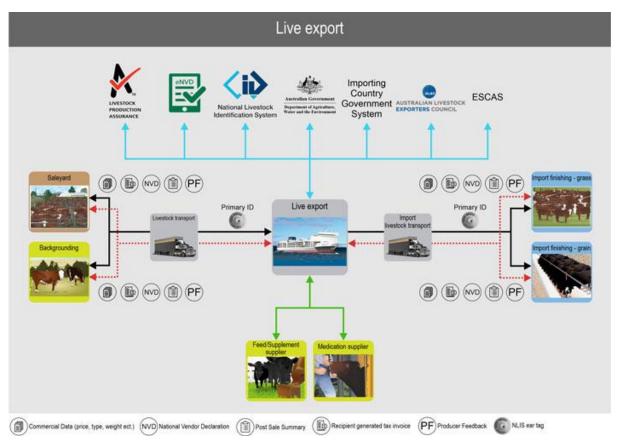


Figure 146. Inputs and outputs of the beef supply chain live export sector.

5.2.5.1.1 Physical Inputs including Critical Tracking Events (CTEs)

Live export is a complicated process requiring a number of considerations and inputs to make everything run efficiently while keeping the cattle's health and wellbeing in mind. Key inputs include the cattle to be exported, veterinary and other expert services, veterinary drugs, and other health treatments as well as feed supplies and supplements including water. There are many documents required for the Critical Tracking of live export Events and this may include the Bill of lading/Air Waybill, Importer/Exporter Agreement, Livestock Export Health Certificate, NVD and Livestock Export Permit.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with inputs to the live export system include the receival of:

- * Cattle
- * Experts and veterinarians
- * Veterinary drugs or other health treatments
- * Feed supplies and supplements.

Table 125. Physical inputs and associated Critical Tracking Event related documents for a beef live export system.

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details

Cattle	These are bovine livestock and may include any type of cattle e.g., cull cattle, calves etc.	Bill of lading/Air Waybill, Exporter/Importer Agreement, Feed and water record, Livestock Export Health Certificate, Livestock Export Licence, Livestock Export Permit, MSA Declaration, NFAS Agents Declaration, NFAS Delivery Docket or Form B, NLIS Movement Update, NVD, Post Sale Summary, Pregnancy Test Report, Receipt of purchase/Tax Invoice, State specific movement forms
Experts and veterinarians	These are professionals who provide services to the breeding enterprise which ensure the safety, wellbeing, and productivity of the livestock.	Receipt of purchase/Tax Invoice, Veterinary prescription
Veterinary drugs or other health treatments	These may be prescribed, or non- prescribed treatments or medications given to ensure the health and wellbeing of the livestock.	Receipt of purchase/Tax Invoice, Veterinary prescription
Feed supplies and supplements	These are supplementary animal feed products such as hay or silage fodder, or mineral supplements which are provided to ensure the production efficiency and health of livestock are maintained. This may also include clean drinking water e.g., where livestock are in transit or at saleyards.	Commodity Vendor Declaration (CVD), Receipt of purchase/Tax Invoice

5.2.5.1.2 Information Inputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). There are many KDEs which can be found on CTE documentation associated with live exports. For example, these may include agreement, movement, and quarantine dates, To and From PICs, To and From Port Codes as well as document identification and licence numbers.

Table 126. Information inputs, Key Data Elements and Critical Tracking Event related documentation for a beef live export system.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
APVMA approval number	This is a unique number allocated to each label by the APVMA.	Yes	Commodity Vendor Declaration, Livestock Export Health Certificate, NVD	For more information visit the Australian Pesticides and Veterinary

				Medicine Authority.
Authorised Officer Identity Number	A unique number issued to Australian Government Authorised Officers for identification purposes.	Yes	Livestock Export Permit	For more information visit the Department of Agriculture, Water and the Environment website.
Batch number	This is a unique number which identifies products sharing certain production characteristics and is used for traceability purposes.	Yes	Commodity Vendor Declaration, Livestock Export Health Certificate, NVD	
Bill of lading/Air Waybill document number	A unique document number issued for traceability purposes.	Yes	Bill of lading/Air Waybill	
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Feed and water record, Receipt of purchase/Tax Invoice	
Contract number	This is a unique number allocated to the contract by the seller.	Yes	Commodity Vendor Declaration, Exporter/Importer Agreement	
Count of Trade Items	Usually encoded in the GS1 barcode, this is the number of trade items e.g., cartons in the logistic unit.	Yes	Bill of lading/Air Waybill	
Date	This is the date of signing or of which a record entry or transaction was made.	Yes	Bill of lading/Air Waybill, Commodity Vendor Declaration, Exporter/Importer Agreement, Feed and water record, Livestock Export Health Certificate, Livestock Export Permit, MSA Declaration, NFAS Agents Declaration, NFAS Delivery Docket or Form B, NVD, Post Sale Summary, Pregnancy Test Report, Receipt of purchase/Tax Invoice, State specific movement forms	

Export Health	A unique number allocated to	Yes	Livestock Export Health	For more
Certificate Number	the health certificate issued for the export consignment for traceability purposes.		Certificate	information visit the Department of Agriculture, Water and the Environment website.
Export Premises Registration number	A unique number issued to Australian Government approved quarantine premises where livestock are prepared for export.	Yes	Livestock Export Health Certificate	For more information visit the Department of Agriculture, Water and the Environment website.
From PIC	The Property Identification Code from/to where the livestock or product were consigned.	Yes	Commodity Vendor Declaration, MSA Declaration, NFAS Delivery Docket or Form B, NLIS Movement Update, NVD, Post Sale Summary, State specific movement forms	For more information visit the Integrity systems website.
From Port Code	Any location used in international trade and transport (e.g., seaport, airports etc.) are issued with an identification code.	Yes	Livestock Export Health Certificate, Livestock Export Permit	For more information visit the Integrity systems website.
Livestock Export Licence Holder number	A unique licence number is allocated to exporters of livestock for a period of one to five years following submission of a correct documentation which is then approved by the Secretary.	Yes	Exporter/Importer Agreement, Livestock Export Health Certificate, Livestock Export Licence, Livestock Export Permit	For more information visit the Integrity systems website.
Livestock Export Permit Number	A unique permit number is allocated for the export of a livestock consignment following submission of a correct and validated Notice of Intention (NOI), Exporter Supply Chain Assurance System (ESCAS) application and other documentation which is then approved by the Secretary.	Yes	Livestock Export Permit	For more information visit the Integrity systems website.

Movement date	The date on which livestock or other products (e.g., feed or meat products) were transported between PICs/establishments.	Yes	Bill of lading/Air Waybill, Commodity Vendor Declaration, Exporter/Importer Agreement, Livestock Export Health Certificate, MSA Declaration, NFAS Agents Declaration, NFAS Delivery Docket or Form B, NLIS Movement Update, NVD, State specific movement forms	
Movement time	This is the time at which cattle were moved from the property (PIC) of origin. Direct consignments travelling to processors by road must be slaughtered with 48 hours of dispatch.	Yes	MSA Declaration	
MSA Declaration Serial Number	Each MSA Declaration form has a unique serial number.	Yes	MSA Declaration	<u>For more</u> information on <u>MSA visit the</u> <u>MLA website.</u>
MSA Licence Number	Any establishment consigning, supplying, or identifying MSA Certified Product must be registered and have a unique MSA Licence Number.	Yes	MSA Declaration, Receipt of purchase/Tax Invoice	For more information on MSA visit the MLA website.
National Grower Registration Number	A unique number assigned to individuals registered with the National Grower Register, an online business register for Australian growers.	Yes	Commodity Vendor Declaration	
Net Weight (Kilograms)	Usually encoded in the GS1 barcode, the Net Weight is a variable measure of the trade item e.g., carton, pallet or shipment recorded in kilograms.	Yes	Bill of lading/Air Waybill	
NFAS Accreditation Number	This is a unique number given to accredited feedlots certified under the National Feedlot Accreditation Scheme (NFAS).	Yes	NFAS Delivery Docket or Form B	For more information visit the AUS- MEAT website.

NFAS Delivery Docket Number	Each NFAS document has a unique number or identity code.	Yes	NFAS Agents Declaration	For more information visit the AUS- MEAT website.
NLIS Tag Number/RFID	All animals transported between PICs must have a permanent National Livestock Identification System tag attached. This tag has a unique animal identification number.	Yes	Bill of lading/Air Waybill, Livestock Export Health Certificate, NLIS Movement Update, Pregnancy Test Report	For more information visit the Integrity systems website.
NVD Serial Number	Each NVD form has a unique serial number.	Yes	NFAS Delivery Docket or Form B, NLIS Movement Update, NVD, Post Sale Summary, Pregnancy Test Report	For more information visit the Integrity systems website.
Official mark	Any stamp, seal, label, or mark that is declared by the regulations to be an official mark. An official mark signifies that the product has been inspected by and approved as safe for human consumption by an Authorised Officer.	Yes	Livestock Export Permit	For more information visit the Department of Agriculture, Water and the Environment website.
Prescription number	A unique certificate number issued for traceability purposes.	Yes	Veterinary prescription	
Producer/Vendor MSA Registration Number	Producers consigning cattle to MSA markets are required to be registered and have a unique MSA Registration Number.	Yes	MSA Declaration	For more information on MSA visit the MLA website.
Product code/description	This is a unique identifier or description assigned by the seller to each product type marketed or for sale.	Yes	Commodity Vendor Declaration	
Quality Assurance Officer (QAO) Certificate Number	A unique number issued to personnel issued with a Statement of Authority for demonstrating skills for compliance with meeting NFAS Rules and Standards.	Yes	NFAS Delivery Docket or Form B	<u>For more</u> <u>information</u> <u>visit the AUS-</u> <u>MEAT website.</u>

Quarantine date range Recipient Australian	This is the date range identifying a period in time in which livestock were quarantined directly prior to exportation.	Yes	Livestock Export Health Certificate Feed and water record,	For more information visit the Department of Agriculture, Water and the Environment website.
Business Number (ABN)	number, issued by the Australian Tax Office, used to identify businesses.		Receipt of purchase/Tax Invoice	information visit the ATO website.
Seller/Supplier Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Feed and water record, Receipt of purchase/Tax Invoice	For more information visit the ATO website.
Shipping Mark	Also known as a port mark, this is a code comprising of three letters representing the foreign establishment number and the last nine digits of the consignment SSCC.	Yes	Bill of lading/Air Waybill	
Supply Chain Number (SCN)	A number allocated to approved applications for the exportation of live animals. These applications have met transportation, handling, slaughter, and other requirements under the Exporter Supply Chain Assurance System (ESCAS) system.	Yes	Livestock Export Permit	For more information visit the Department of Agriculture, Water and the Environment website.
To PIC	The Property Identification Code from/to where the livestock or product were consigned.	Yes	Commodity Vendor Declaration, NLIS Movement Update, NVD, Post Sale Summary, State specific movement forms	For more information visit the Integrity systems website.
To Port Code	Any location used in international trade and transport (e.g., seaport, airports etc.) are issued with an identification code.	Yes	Livestock Export Health Certificate, Livestock Export Permit	For more information visit the Department of Agriculture, Water and the

				Environment website.
Transport registration number	The registration number of the vehicle in which the animals or product were transported. For shipments of product this will be a shipping container number.	Yes	Bill of lading/Air Waybill, Livestock Export Health Certificate, NVD	
Treatment date	The date on which a treatment or product was applied to a unit e.g., paddock, animal, fodder etc.	Yes	Commodity Vendor Declaration, Feed and water record, Livestock Export Health Certificate, NVD	
Veterinary Registration Number	A unique number issued to veterinarians who are registered to practice, under the state legislative requirements, within the state in which they reside.	Yes	Livestock Export Health Certificate, Pregnancy Test Report, Veterinary prescription	

5.2.5.1.3 Physical Outputs including Critical Tracking Events (CTEs)

Key outputs of the live export process are limited to the cattle themselves. There are many documents required for the Critical Tracking of live export Events and this may include the Bill of lading/Air Waybill, Importer/Exporter Agreement, Livestock Export Health Certificate, NVD and Livestock Export Permit. On arrival at the port of the importing country, animals typically undergo inspection by quarantine officers. Here a document such as the Veterinary Services Form/Import release is signed off before animals are released to the importer.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with the outputs of the live export system include the movement of:

* Cattle

off the property, premises, or supply chain sector.

5.2.5.1.4 Information Outputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). There are many KDEs which can be found on CTE documentation associated with live exports. For example, these may include agreement, movement, and quarantine dates, To and From PICs, To and From Port Codes as well as document identification and licence numbers.

Table 127. Information outputs, Key Data Elements and Critical Tracking Event related documentation for a beef live export system.

Attributes (including	Description of the	ls a	Critical Tracking Event (CTE)	More details
KDEs)	Attributes (including	KDE	related documents (including	
	KDEs)		electronic)	

APVMA approval number	This is a unique number allocated to each label by the APVMA.	Yes	Livestock Export Health Certificate, NVD	For more information visit the Australian Pesticides and Veterinary Medicine Authority.
Authorised Officer Identity Number	A unique number issued to Australian Government Authorised Officers for identification purposes.	Yes	Livestock Export Permit	For more information visit the Department of Agriculture, Water and the Environment website.
Batch number	This is a unique number which identifies products sharing certain production characteristics and is used for traceability purposes.	Yes	Livestock Export Health Certificate, NVD	
Bill of lading/Air Waybill document number	A unique document number issued for traceability purposes.	Yes	Bill of lading/Air Waybill	
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Feed and water record, Receipt of purchase/Tax Invoice	
Contract number	This is a unique number allocated to the contract by the seller.	Yes	Exporter/Importer Agreement	
Count of Trade Items	Usually encoded in the GS1 barcode, this is the number of trade items e.g., cartons in the logistic unit.	Yes	Bill of lading/Air Waybill	
Customs Entry number	A unique number assigned to an entry document and issued to importation shipments by customs for identification purposes.	Yes	Veterinary Services Form/Import release	
Date	This is the date of signing or of which a record entry or transaction was made.	Yes	Bill of lading/Air Waybill, Exporter/Importer Agreement, Feed and water record, Livestock Export Health Certificate,	

			Livestock Export Permit, MSA Declaration, NFAS Agents Declaration, NFAS Delivery Docket or Form B, NVD, Post Sale Summary, Pregnancy Test Report, Receipt of purchase/Tax Invoice, State specific movement forms, Veterinary Services Form/Import release	
Export Health Certificate Number	A unique number allocated to the health certificate issued for the export consignment for traceability purposes.	Yes	Livestock Export Health Certificate	For more information visit the Department of Agriculture, Water and the Environment website.
Export Premises Registration number	A unique number issued to Australian Government approved quarantine premises where livestock are prepared for export.	Yes	Livestock Export Health Certificate	For more information visit the Department of Agriculture, Water and the Environment website.
From PIC	The Property Identification Code from/to where the livestock or product were consigned.	Yes	MSA Declaration, NFAS Delivery Docket or Form B, NLIS Movement Update, NVD, Post Sale Summary, State specific movement forms	For more information visit the Integrity systems website.
From Port Code	Any location used in international trade and transport (e.g., seaport, airports etc.) are issued with an identification code.	Yes	Livestock Export Health Certificate, Livestock Export Permit	For more information visit the Department of Agriculture, Water and the Environment website.
Import Permit Number	A unique permit number is allocated for the import consignment following submission of correct and validated documentation approved by the importing country.	Yes	Import Permit, Veterinary Services Form/Import release	For more information visit the Department of Agriculture, Water and the Environment website.

Livestock Export Licence Holder number	A unique licence number is allocated to exporters of livestock for a period of one to five years following submission of a correct documentation which is then approved by the Secretary.	Yes	Exporter/Importer Agreement, Livestock Export Health Certificate, Livestock Export Licence, Livestock Export Permit	For more information visit the Department of Agriculture, Water and the Environment website.
Livestock Export Permit Number	A unique permit number is allocated for the export of a livestock consignment following submission of a correct and validated Notice of Intention (NOI), Exporter Supply Chain Assurance System (ESCAS) application and other documentation which is then approved by the Secretary.	Yes	Livestock Export Permit	For more information visit the Department of Agriculture, Water and the Environment website.
Movement date	The date on which livestock or other products (e.g., feed or meat products) were transported between PICs/establishments.	Yes	Bill of lading/Air Waybill, Exporter/Importer Agreement, Livestock Export Health Certificate, MSA Declaration, NFAS Agents Declaration, NFAS Delivery Docket or Form B, NLIS Movement Update, NVD, State specific movement forms, Veterinary Services Form/Import release	
Movement time	This is the time at which cattle were moved from the property (PIC) of origin. Direct consignments travelling to processors by road must be slaughtered with 48 hours of dispatch.	Yes	MSA Declaration	
MSA Declaration Serial Number	Each MSA Declaration form has a unique serial number.	Yes	MSA Declaration	For more information on MSA visit the MLA website.
MSA Licence Number	Any establishment consigning, supplying, or identifying MSA Certified Product must be registered and have a	Yes	MSA Declaration, Receipt of purchase/Tax Invoice	For more information on MSA visit

Net Weight (Kilograms)	unique MSA Licence Number. Usually encoded in the GS1 barcode, the Net Weight is a variable measure of the trade item e.g., carton, pallet or shipment recorded in kilograms.	Yes	Bill of lading/Air Waybill	the MLA website.
NFAS Accreditation Number	This is a unique number given to accredited feedlots certified under the National Feedlot Accreditation Scheme (NFAS).	Yes	NFAS Delivery Docket or Form B	For more information visit the AUS- MEAT website.
NFAS Delivery Docket Number	Each NFAS document has a unique number or identity code.	Yes	NFAS Agents Declaration	For more information visit the AUS- MEAT website.
NLIS Tag Number/RFID	All animals transported between PICs must have a permanent National Livestock Identification System tag attached. This tag has a unique animal identification number.	Yes	Bill of lading/Air Waybill, Livestock Export Health Certificate, NLIS Movement Update, Pregnancy Test Report	For more information visit the Integrity systems website.
NVD Serial Number	Each NVD form has a unique serial number.	Yes	NFAS Delivery Docket or Form B, NLIS Movement Update, NVD, Post Sale Summary, Pregnancy Test Report	For more information visit the Integrity systems website.
Official mark	Any stamp, seal, label, or mark that is declared by the regulations to be an official mark. An official mark signifies that the product has been inspected by and approved as safe for human consumption by an Authorised Officer.	Yes	Livestock Export Permit	For more information visit the Department of Agriculture, Water and the Environment website.

		1	1	T1
Producer/Vendor MSA Registration Number	Producers consigning cattle to MSA markets are required to be registered and have a unique MSA Registration Number.	Yes	MSA Declaration	For more information on MSA visit the MLA website.
Quality Assurance Officer (QAO) Certificate Number	A unique number issued to personnel issued with a Statement of Authority for demonstrating skills for compliance with meeting NFAS Rules and Standards.	Yes	NFAS Delivery Docket or Form B	For more information visit the AUS- MEAT website.
Quarantine date range	This is the date range identifying a period in time in which livestock were quarantined directly prior to exportation.	Yes	Livestock Export Health Certificate	For more information visit the Department of Agriculture, Water and the Environment website.
Recipient Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Feed and water record, Receipt of purchase/Tax Invoice	For more information visit the ATO website.
Seller/Supplier Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Feed and water record, Receipt of purchase/Tax Invoice	For more information visit the ATO website.
Shipping Mark	Also known as a port mark, this is a code comprising of three letters representing the foreign establishment number and the last nine digits of the consignment SSCC.	Yes	Bill of lading/Air Waybill	
Supply Chain Number (SCN)	A number allocated to approved applications for the exportation of live animals. These applications have met transportation, handling, slaughter, and other requirements under the Exporter Supply Chain	Yes	Livestock Export Permit	For more information visit the Department of Agriculture, Water and the Environment website.

To PIC	Assurance System (ESCAS) system. The Property Identification Code from/to where the livestock or product were consigned.	Yes	NLIS Movement Update, NVD, Post Sale Summary, State specific movement forms	For more information visit the Integrity systems website.
To Port Code	Any location used in international trade and transport (e.g., seaport, airports etc.) are issued with an identification code.	Yes	Livestock Export Health Certificate, Livestock Export Permit, Veterinary Services Form/Import release	For more information visit the Department of Agriculture, Water and the Environment website.
Transport registration number	The registration number of the vehicle in which the animals or product were transported. For shipments of product this will be a shipping container number.	Yes	Bill of lading/Air Waybill, Livestock Export Health Certificate, NVD, Veterinary Services Form/Import release	
Treatment date	The date on which a treatment or product was applied to a unit e.g., paddock, animal, fodder etc.	Yes	Feed and water record, Livestock Export Health Certificate, NVD	
Veterinary Registration Number	A unique number issued to veterinarians who are registered to practice, under the state legislative requirements, within the state in which they reside.	Yes	Livestock Export Health Certificate, Pregnancy Test Report	

5.2.5.1.5 Regulatory and Industry Programs

- * Australian Live Exporters Council (ALEC)
- * Department of Agriculture
- * eNVD
- * Exporter Supply Chain Assurance System (ESCAS)
- * Importing Country Government System
- * Livestock Production Assurance (LPA)
- * National Livestock Identification System (NLIS)

5.2.5.1.6 Supply Chain Node Traceability

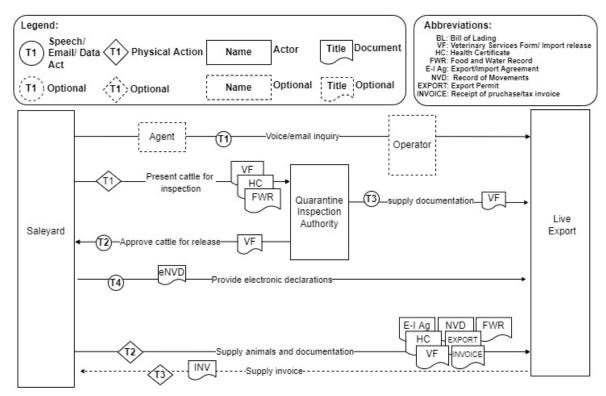
The National Livestock Identification System (NLIS) is the Australian livestock traceability program which is administered by Integrity Systems Company (ISC). Where stipulated by State legislation and certain export markets, the NLIS system requires all animals bought, sold, and moved along the supply chain to be tagged with an accredited NLIS ID tag. Each tag has an NLIS tag number or Radio Frequency Identifier (RFID) for the traceability of the animal throughout its lifetime. Every property which holds livestock must have a Property Identification Code (PIC) to which the livestock are assigned in the NLIS Database. Each time livestock are transferred between PICs within Australia they must be accompanied by a livestock movement declaration, such as the National Vendor Declaration (NVD) form. This document typically outlines the transporter details, consignment details, compliance with intended market specifications, withholding periods, and the details of the new property PIC. All livestock movements between PICs require an NLIS movement update to be made by either or both the consigner and receiver. Where NLIS ID tags are lost livestock must be issued with a new post-breeder tag if not on the PIC of birth and this reconciled in the NLIS Database. For animals loaded for live export, it is the exporters responsibility to ensure that all livestock are transferred from the port PIC to EEEEEEEE (8Es) which signifies that livestock have been exported. The importer of exported livestock must demonstrate that these livestock remain traceable throughout the supply chain up to the point of slaughter. Livestock must be effectively identified, and all movements recorded to allow traceability back to the property of birth in the exporting country i.e., Australia.

5.2.5.1.7 Data flow diagrams

Direction	Description	
Input	Saleyard to Live Export	
Input	Backgrounding to Live Export	
Output	Live Export to Import Finishing (Grass)	
Output	Live Export to Import Finishing (Grain)	

Table 128. Data flow diagrams for the input and outputs of beef live export system

5.2.5.1.7.1 Saleyard to Live Export

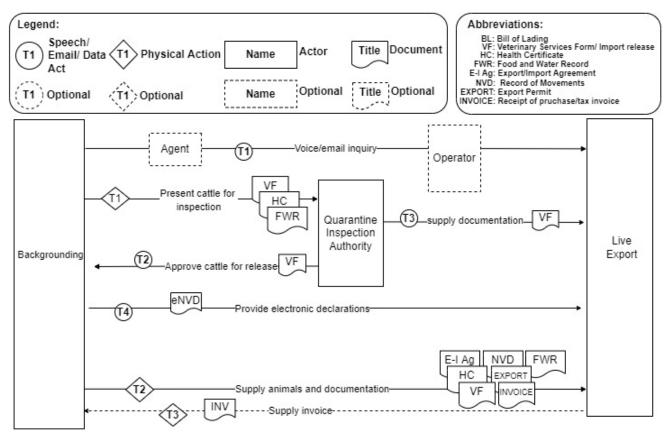


Saleyard to Live Export

Figure 147. Dat

a or information flows from saleyards to live export systems in the beef supply chain.

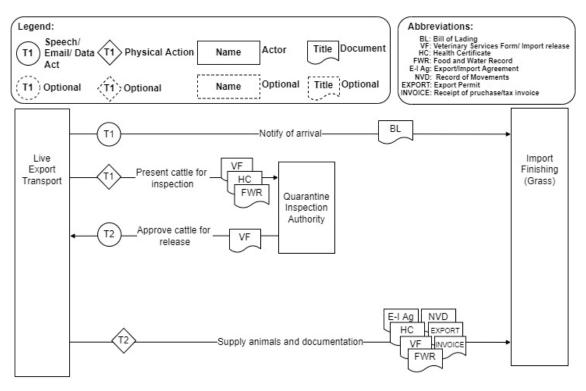
5.2.5.1.7.2 Backgrounding to Live Export



Backgrounding to Live Export

Figure 148. Data or information flows from backgrounding to live export systems in the beef supply chain.

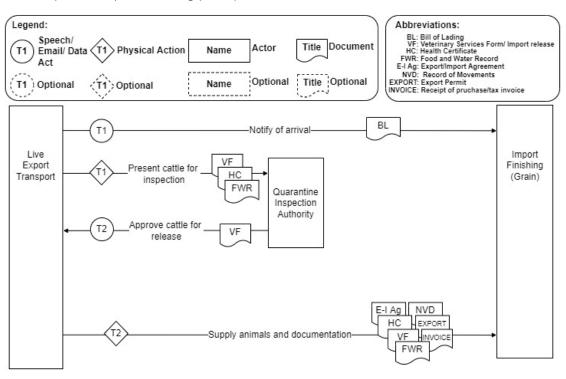
5.2.5.1.7.3 Live Export to Import Finishing (Grass)



Live Export to Import Finishing (grass)

Figure 149. Data or information flows from the live export to import finishing (grass) systems in the beef supply chain.

5.2.5.1.7.4 Live Export to Import Finishing (Grain)



Live Export to Import Finishing (grain)

Figure 150. Data or information flows from the live export to import finishing (grain) systems in the beef supply chain.

5.2.5.2 Non packer exporter

Australia is one of the largest exporters of beef in the world by volume and value of meat and this is largely due to strict animal welfare practices and quality control standards. This has allowed consumer demand for Australian beef to remain strong in a competitive global market against other large exporters such as Brazil and India. Australia principally exports meat to North America, the Middle East, Russia, China, South East Asia, Korea and Japan. Non Packer Exporters (NPEs) are holders of a Meat Export Licence who do not operate a premises for the purpose of packaging meat for export registered under the Australian Government Department for Agriculture. NPEs are unable to verify information pertaining to the product but instead work with the packing establishment to ensure product is eligible for export and that all the necessary documentation is organised and approved.

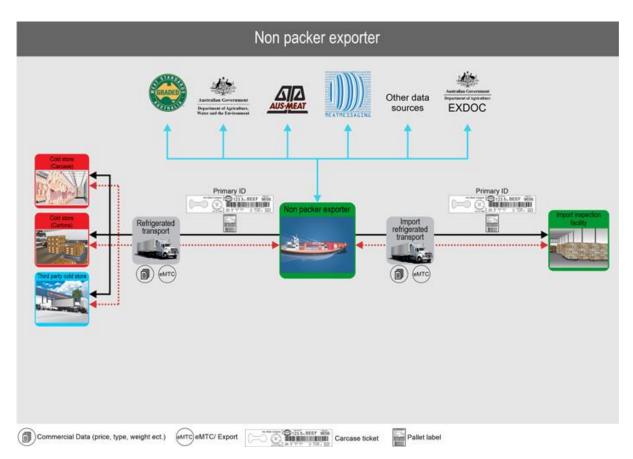


Figure 151. Inputs and outputs of the beef supply chain non packer exporter sector.

5.2.5.2.1 Physical Inputs including Critical Tracking Events (CTEs)

NPEs are often buyers and resellers of meat and meat product, organising the documentation associated with the sale and exportation of product. They typically do not see the product; therefore, the inputs into the NPE system are the Critical Tracking Event related documentation. These may include documents such as the Bill of lading/Air Waybill, Export Health Certificate and Certificate of Analysis.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with inputs to the Non Packer Exporter system include the receival of:

* Information/ Documentation (meat and meat products Container System Unit).

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Information/ Documentation (meat and meat products Container System Unit)	As NPEs typically do not see the product, information/documentation includes the Critical Tracking Event related documentation and information required for product movement.	Bill of lading/Air Waybill, Delivery Docket/Manifest, Export Health Certificate, Export Permit, Meat Messaging Consignment Report, Meat Transfer Certificate (MTC), Official seal, Certificate of Analysis (COA), Receipt of purchase/Tax Invoice	

Table 129. Physical inputs and associated Critical Tracking Event related documents for a beef non packer exporter system.

5.2.5.2.2 Information Inputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). Information inputs into the NPE system are those KDEs which can be drawn from CTE documentation. These may include document numbers for documents such as the Bill of lading/Air Waybill, Meat Transfer Certificate and Certificate of Analysis as well as other product specific information.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Analysis Date	This is the date on which a product sample was analysed.	Yes	Certificate of Analysis (COA)	
Bill of lading/Air Waybill document number	A unique document number issued for traceability purposes.	Yes	Bill of lading/Air Waybill, Certificate of Analysis (COA)	
Certificate of Analysis number	A unique certificate number issued for traceability purposes.	Yes	Certificate of Analysis (COA)	
COA test lot identifier	This is a unique identifier allocated to all cartons, pallets, and shipping containers for which an analysis sample represents.	Yes	Certificate of Analysis (COA)	
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Bill of lading/Air Waybill, Certificate of Analysis (COA),	

Table 130. Information inputs, Key Data Elements and Critical Tracking Event related documentation for a beef non packer exporter system.

			Receipt of purchase/Tax Invoice	
Consignment Serial Shipping Container Code (SSCC)	Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., shipment/message that is assigned by the establishment constructing the unit. The SSCC remains the same for the life of the logistic unit.	Yes	Bill of lading/Air Waybill, Meat Messaging Consignment Report, Meat Transfer Certificate (MTC)	For more information visit the GS1 website.
Count of Pallets	This is the number of pallets in the logistic unit e.g., container system unit.	Yes	Meat Messaging Consignment Report	
Count of Trade Items	Usually encoded in the GS1 barcode, this is the number of trade items e.g., cartons in the logistic unit.	Yes	Bill of lading/Air Waybill, Meat Messaging Consignment Report	For more information visit the GS1 website.
Date	This is the date of signing or of which a record entry or transaction was made.	Yes	Bill of lading/Air Waybill, Certificate of Analysis (COA), Meat Messaging Consignment Report, Meat Transfer Certificate (MTC), Receipt of purchase/Tax Invoice	
Export Health Certificate Number	A unique number allocated to the health certificate issued for the export consignment for traceability purposes.	Yes	Export Health Certificate, Meat Messaging Consignment Report	For more information visit the Department of Agriculture, Water and the Environment website.
Export Permit Number	A unique permit number is allocated for the export consignment following submission of a correct and validated Request For Permit (RFP) which is then approved by the Secretary.	Yes	Export Permit	For more information visit the Department of Agriculture, Water and the Environment website.
From Establishment number	A number issued by Federal and State Authorities to identify the originating site from which meat or meat products were distributed to domestic or export markets. For	Yes	Certificate of Analysis (COA), Export Health Certificate, Meat Messaging Consignment Report,	

	transfer certificates, the Establishment numbers for both the dispatching and receiving establishments are recorded.		Meat Transfer Certificate (MTC)	
Global Trade Item Number (GTIN)	Encoded in the GS1 barcode, the GTIN is a globally unique 14-digit number used to identify trade items, products, or services.	Yes	Meat Messaging Consignment Report	For more information visit the GS1 website.
Movement date	The date on which livestock or other products (e.g., feed or meat products) were transported between PICs/establishments.	Yes	Bill of lading/Air Waybill, Certificate of Analysis (COA), Export Health Certificate, Meat Transfer Certificate (MTC)	
MSA Licence Number	Any establishment consigning, supplying, or identifying MSA Certified Product must be registered and have a unique MSA Licence Number.	Yes	Receipt of purchase/Tax Invoice	<u>For more</u> information on <u>MSA visit the</u> <u>MLA website.</u>
Net Weight (Kilograms)	Usually encoded in the GS1 barcode, the Net Weight is a variable measure of the trade item e.g., carton, pallet or shipment recorded in kilograms.	Yes	Bill of lading/Air Waybill, Export Health Certificate, Meat Messaging Consignment Report	For more information visit the GS1 website.
Packaging Date	Encoded in the GS1 barcode, the Packaging Date is the date on which the item was packaged and is recorded in the format year, month, day (YYMMDD).	Yes	Certificate of Analysis (COA)	For more information visit the GS1 website.
Pallet Serial Shipping Container Code (SSCC)	Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., pallet that is assigned by the establishment constructing the unit. The SSCC remains the same for the life of the logistic unit.	Yes	Meat Messaging Consignment Report, Meat Transfer Certificate (MTC)	For more information visit the GS1 website.
Production Date (YYMMDD)	Encoded in the GS1 barcode, this is the 'kill' or slaughter' date of the product and is recorded in the format year, month, day (YYMMDD).	Yes	Certificate of Analysis (COA), Meat Transfer Certificate (MTC)	For more information visit the GS1 website.

Recipient Australian	This is an 11-digit registration	Yes	Receipt of	For more
Business Number (ABN)	number, issued by the Australian Tax Office, used to identify businesses.		purchase/Tax Invoice	information visit the ATO website.
Seal Serial Number	This is a unique serial number printed on any tamper-evident seal issued by the Department.	Yes	Bill of lading/Air Waybill, Meat Transfer Certificate (MTC), Official seal	For more information visit the GS1 website.
Seller/Supplier Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Receipt of purchase/Tax Invoice	For more information visit the ATO website.
Shipping Mark	Also known as a port mark, this is a code comprising of three letters representing the foreign establishment number and the last nine digits of the consignment SSCC.	Yes	Bill of lading/Air Waybill, Certificate of Analysis (COA), Export Health Certificate, Meat Messaging Consignment Report	
To Establishment number	A number issued by Federal and State Authorities to identify the originating site from which meat or meat products were distributed to domestic or export markets. For transfer certificates, the Establishment numbers for both the dispatching and receiving establishments are recorded.	Yes	Meat Transfer Certificate (MTC)	
Trade description	This is a collective set of words that says what the product is and may include information such as species, net weight of product, name and address of establishments, category ciphers, market endorsements, MSA eating quality etc.	Yes	Export Health Certificate, Meat Messaging Consignment Report, Meat Transfer Certificate (MTC)	
Transfer Certificate number	A unique certificate number issued for traceability purposes.	Yes	Meat Messaging Consignment Report, Meat Transfer Certificate (MTC)	For more information visit the Department of Agriculture, Water and the Environment website.
Transport registration number	The registration number of the vehicle in which the animals or product were transported. For	Yes	Bill of lading/Air Waybill, Export Health Certificate,	

shipments of product this will be a shipping container number.	Meat Messaging Consignment Report, Meat Transfer Certificate (MTC)	
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5.2.5.2.3 Physical Outputs including Critical Tracking Events (CTEs)

NPEs are often buyers and resellers of meat and meat product, organising the documentation associated with the sale and exportation of product. They typically do not see the product; therefore, the outputs of the NPE system are the Critical Tracking Event related documentation. These may include documents such as the Bill of lading/Air Waybill, Export Health Certificate and Certificate of Analysis.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with the outputs of the Non Packer Exporter system include the movement of: * Information/ Documentation (meat and meat products Container System Unit)

off the property, premises, or supply chain sector.

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Information/ Documentation (meat and meat products Container System Unit)	As NPEs typically do not see the product, information/documentation includes the Critical Tracking Event related documentation and information required for product movement.	Bill of lading/Air Waybill, Delivery Docket/Manifest, Export Health Certificate, Export Permit, Meat Messaging Consignment Report, Meat Transfer Certificate (MTC), Official seal, Certificate of Analysis (COA), Receipt of purchase/Tax Invoice	

Table 131. Physical outputs and associated Critical Tracking Event related documents for a beef non packer exporter system.

5.2.5.2.4 Information Outputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). Information outputs of the NPE system are those KDEs which can be drawn from CTE documentation. These may include document numbers for documents such as the Bill of lading/Air Waybill, Meat Transfer Certificate and Certificate of Analysis as well as other product specific information.

Table 132. Information outputs, Key Data Elements and Critical Tracking Event related documentation for a beef non packer exporter system.

Attributes (including Descrip KDEs) (includ	tion of the Attributes Is a ng KDEs) KDI	(DE	Critical Tracking Event (CTE) related documents (including electronic)	More details
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Analysis Date	This is the date on which a product sample was analysed.	Yes	Certificate of Analysis (COA)	
Bill of lading/Air Waybill document number	A unique document number issued for traceability purposes.	Yes	Bill of lading/Air Waybill, Certificate of Analysis (COA)	
Certificate of Analysis number	A unique certificate number issued for traceability purposes.	Yes	Certificate of Analysis (COA)	
COA test lot identifier	This is a unique identifier allocated to all cartons, pallets, and shipping containers for which an analysis sample represents.	Yes	Certificate of Analysis (COA)	
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Bill of lading/Air Waybill, Certificate of Analysis (COA), Receipt of purchase/Tax Invoice	
Consignment Serial Shipping Container Code (SSCC)	Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., shipment/message that is assigned by the establishment constructing the unit. The SSCC remains the same for the life of the logistic unit.	Yes	Bill of lading/Air Waybill, Meat Messaging Consignment Report, Meat Transfer Certificate (MTC)	For more information visit the GS1 website.
Count of Pallets	This is the number of pallets in the logistic unit e.g., container system unit.	Yes	Meat Messaging Consignment Report	
Count of Trade Items	Usually encoded in the GS1 barcode, this is the number of trade items e.g., cartons in the logistic unit.	Yes	Bill of lading/Air Waybill, Meat Messaging Consignment Report	For more information visit the GS1 website.
Date	This is the date of signing or of which a record entry or transaction was made.	Yes	Bill of lading/Air Waybill, Certificate of Analysis (COA), Meat Messaging Consignment Report, Meat Transfer Certificate (MTC), Receipt of purchase/Tax Invoice	
Export Health Certificate Number	A unique number allocated to the health certificate issued for the	Yes	Export Health Certificate, Meat	For more information visit the Department of Agriculture,

	export consignment for traceability purposes.		Messaging Consignment Report	Water and the Environment website.
Export Permit Number	A unique permit number is allocated for the export consignment following submission of a correct and validated Request For Permit (RFP) which is then approved by the Secretary.	Yes	Export Permit	For more information visit the Department of Agriculture, Water and the Environment website.
From Establishment number	A number issued by Federal and State Authorities to identify the originating site from which meat or meat products were distributed to domestic or export markets. For transfer certificates, the Establishment numbers for both the dispatching and receiving establishments are recorded.	Yes	Certificate of Analysis (COA), Export Health Certificate, Meat Messaging Consignment Report, Meat Transfer Certificate (MTC)	
Global Trade Item Number (GTIN)	Encoded in the GS1 barcode, the GTIN is a globally unique 14-digit number used to identify trade items, products, or services.	Yes	Meat Messaging Consignment Report	For more information visit the GS1 website.
Movement date	The date on which livestock or other products (e.g., feed or meat products) were transported between PICs/establishments.	Yes	Bill of lading/Air Waybill, Certificate of Analysis (COA), Export Health Certificate, Meat Transfer Certificate (MTC)	
MSA Licence Number	Any establishment consigning, supplying, or identifying MSA Certified Product must be registered and have a unique MSA Licence Number.	Yes	Receipt of purchase/Tax Invoice	For more information on MSA visit the MLA website.
Net Weight (Kilograms)	Usually encoded in the GS1 barcode, the Net Weight is a variable measure of the trade item e.g., carton, pallet or shipment recorded in kilograms.	Yes	Bill of lading/Air Waybill, Export Health Certificate, Meat Messaging Consignment Report	For more information visit the GS1 website.
Packaging Date	Encoded in the GS1 barcode, the Packaging Date is the date on which the item was packaged and is recorded in the format year, month, day (YYMMDD).	Yes	Certificate of Analysis (COA)	For more information visit the GS1 website.

Pallet Serial Shipping Container Code (SSCC) Production Date	Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., pallet that is assigned by the establishment constructing the unit. The SSCC remains the same for the life of the logistic unit. Encoded in the GS1 barcode, this is	Yes	Meat Messaging Consignment Report, Meat Transfer Certificate (MTC)	For more information visit the GS1 website.
(YYMMDD)	the 'kill' or slaughter' date of the product and is recorded in the format year, month, day (YYMMDD).		(COA), Meat Transfer Certificate (MTC)	information visit the GS1 website.
Recipient Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Receipt of purchase/Tax Invoice	For more information visit the ATO website.
Seal Serial Number	This is a unique serial number printed on any tamper-evident seal issued by the Department.	Yes	Bill of lading/Air Waybill, Meat Transfer Certificate (MTC), Official seal	For more information visit the GS1 website.
Seller/Supplier Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Receipt of purchase/Tax Invoice	<u>For more</u> <u>information visit</u> <u>the ATO website.</u>
Shipping Mark	Also known as a port mark, this is a code comprising of three letters representing the foreign establishment number and the last nine digits of the consignment SSCC.	Yes	Bill of lading/Air Waybill, Certificate of Analysis (COA), Export Health Certificate, Meat Messaging Consignment Report	
To Establishment number	A number issued by Federal and State Authorities to identify the originating site from which meat or meat products were distributed to domestic or export markets. For transfer certificates, the Establishment numbers for both the dispatching and receiving establishments are recorded.	Yes	Meat Transfer Certificate (MTC)	
Trade description	This is a collective set of words that says what the product is and may include information such as species, net weight of product, name and address of establishments, category	Yes	Export Health Certificate, Meat Messaging Consignment Report,	

	ciphers, market endorsements, MSA eating quality etc.		Meat Transfer Certificate (MTC)	
Transfer Certificate number	A unique certificate number issued for traceability purposes.	Yes	Meat Messaging Consignment Report, Meat Transfer Certificate (MTC)	For more information visit the Department of Agriculture, Water and the Environment website.
Transport registration number	The registration number of the vehicle in which the animals or product were transported. For shipments of product this will be a shipping container number.	Yes	Bill of lading/Air Waybill, Export Health Certificate, Meat Messaging Consignment Report, Meat Transfer Certificate (MTC)	

5.2.5.2.5 Regulatory and Industry Programs

- * Meat Standards Australia (MSA)
- * AUS-MEAT
- * Department of Agriculture
- * Export Documentation System (EXDOC)
- * Meat Messaging
- * Other data sources

5.2.5.2.6 Supply Chain Node Traceability

Non Packer Exporters (NPEs) are holders of a Meat Export Licence who do not operate a premises for the purpose of packaging meat for export registered under the Australian Government Department for Agriculture. Instead, NPEs are often buyers and resellers of product and organise the documentation associated with the sale and exportation of product.

Like exporters, the traceability of product which is traded by NPEs back to the live animal and property of origin is dependent on the form (carcase, carton) in which the product is being exported. All container system units undergoing export must be accompanied by a Meat Messaging Consignment Report and Meat Transfer Certificate (MTC) or Animal By Product Transfer Certificate (BPTC). While the NPE does not touch the product, they are involved in the preparation and handling of this documentation. The Consignment Report is issued to the buyer of product and lists all the logistic unit and subunit unique serialised identifiers contained within the Container System Unit including the Consignment Serial Shipping Container Code (SSCC), Pallet Serial Shipping Container Code, and scanned and verified carton label serial identifiers. Additionally, the Transfer Certificate details the serialised logistic unit identifiers such as the Serial Shipping Container Code (SSCC). These documents allow traceability of the unit and its subunits back to either the live animal and property of origin (for carcases) or processor production run (for cartons and palletised meat and meat products).

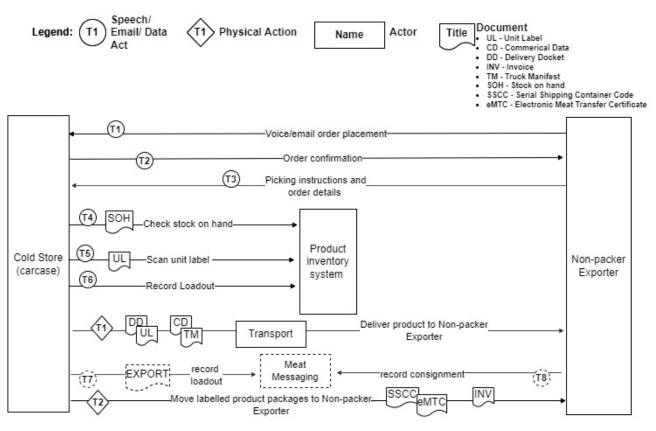
For traceability information pertaining to carton and carcase products please refer to Boning Room and Carcase Chiller 'Supply Chain Node Traceability' respectively.

5.2.5.2.7 Data flow diagrams

Direction	Description	
Input	Cold Store (carcase) to Non packer Exporter	
Input	Cold Store (cartons) to Non Packer Exporter	
Output	Third Party Cold Store to Non packer Exporter	
Output	Non packer Exporter to Import Inspection Facility	

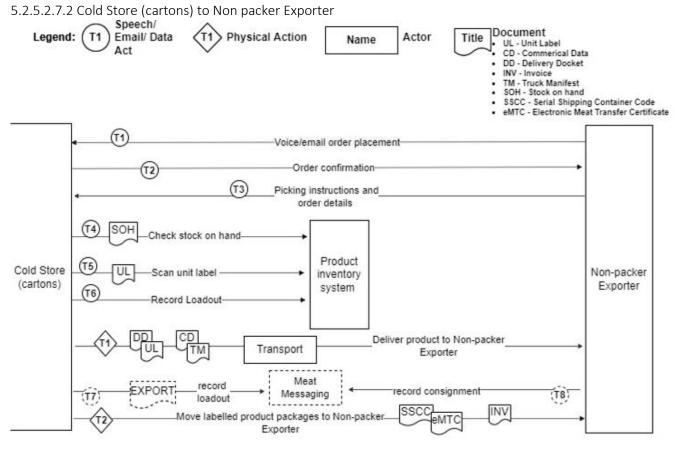
Table 133. Data flow diagrams for the inputs and outputs of a beef non-packer exporter system

5.2.5.2.7.1 Cold Store (carcase) to Non packer Exporter



Cold Store (carcase) to Non-packer Exporter

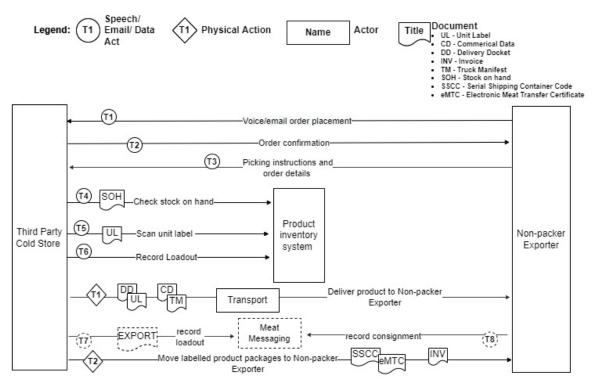
Figure 152. Data or information flows from the cold store (carcase) to non-packer exporter system in the beef supply chain.



Cold Store (cartons) to Non-packer Exporter

Figure 153. Data or information flows from the cold store (carton) to non-packer exporter systems in the beef supply chain.

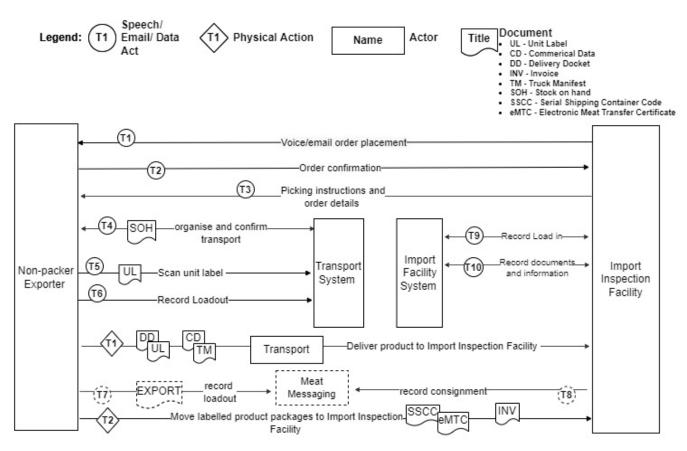
5.2.5.2.7.3 Third Party Cold Store to Non packer Exporter



Third Party Cold Store to Non-packer Exporter

Figure 154. Data or information flows from the third party cold store to non-packer exporter systems in the beef supply chain.

5.2.5.2.7.4 Non packer Exporter to Import Inspection Facility



Non Packer Exporter to Import Inspection Facility

Figure 155. Data or information flows from the non-packer exporter to import inspection facility systems in the beef supply chain.

5.2.5.3 Export

Australia is one of the largest exporters of beef in the world by volume and value of meat and this is largely due to strict animal welfare practices and quality control standards. This has allowed consumer demand for Australian beef to remain strong in a competitive global market against other large exporters such as Brazil and India. Australia principally exports meat to North America, the Middle East, Russia, China, South East Asia, Korea, and Japan. Simply, the export process involves the licensing of export premises, inspection of meat and meat products, process auditing, loading, and movement of product. Meat and meat products or meat by-products (packaged into container system units) are typically delivered to the port of export, via refrigerated or bulk transport respectively, for loading into the export vessel.

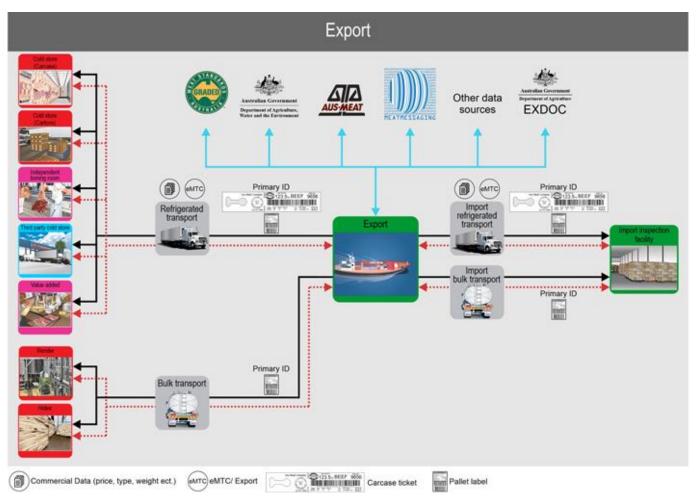


Figure 156. Inputs and outputs of the beef supply chain export sector.

5.2.5.3.1 Physical Inputs including Critical Tracking Events (CTEs)

Prior to export, packaged product is loaded into refrigerated shipping containers and transported to the export port to be loaded into ships or airfreight. Therefore, container system units, which contain packaged meat product, are the physical inputs to the export system. Critical Tracking Event related documentation such as the Bill of lading/Air Waybill, as well as Export Health Certificate and Certificate of Analysis, must accompany the movement of product to an importing country.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with inputs to the export system include the receival of:

- * Container System Unit (meat and meat products)
- * Container System Unit (render and hide product).

Table 134. Physical inputs and associated Critical Tracking Event related documents for a beef export system.

Event	Description of the inputs	Critical Tracking Event (CTE) related documents	More
related to		(including electronic)	details
the inputs			

Container	A container designed for	Bill of lading/Air Waybill, Delivery Docket/Manifest,	
System	use as a unit of cargo	Export Health Certificate, Export Permit, Meat Messaging	
Unit (meat	handling equipment in	Consignment Report, Meat Transfer Certificate (MTC),	
and meat	the transport of goods by	Official seal, Receipt of purchase/Tax Invoice, Certificate	
products)	aircraft or ship.	of Analysis (COA)	
Container System Unit (render and hide product)	A container designed for use as a unit of cargo handling equipment in the transport of goods by aircraft or ship.	Animal By Product Transfer Certificate (BPTC), Bill of lading/Air Waybill, Delivery Docket/Manifest, Export clearance documentation, Export Permit, Meat Messaging Consignment Report, Certificate of Analysis (COA), Receipt of purchase/Tax Invoice	

5.2.5.3.2 Information Inputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). Information inputs into the export system are those KDEs which can be drawn from CTE documentation. These may include document numbers for documents such as the Bill of lading/Air Waybill, Meat Transfer Certificate and Certificate of Analysis as well as other product specific information.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Analysis Date	This is the date on which a product sample was analysed.	Yes	Certificate of Analysis (COA)	
Bill of lading/Air Waybill document number	A unique document number issued for traceability purposes.	Yes	Bill of lading/Air Waybill, Certificate of Analysis (COA)	
Certificate of Analysis number	A unique certificate number issued for traceability purposes.	Yes	Certificate of Analysis (COA)	
COA test lot identifier	This is a unique identifier allocated to all cartons, pallets, and shipping containers for which an analysis sample represents.	Yes	Certificate of Analysis (COA)	
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Bill of lading/Air Waybill, Certificate of Analysis (COA), Receipt of purchase/Tax Invoice	

Table 135. Information inputs, Key Data Elements and Critical Tracking Event related documentation for a beef export system.

Consignment Serial Shipping Container Code (SSCC)	Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., shipment/message that is assigned by the establishment constructing the unit. The SSCC remains the same for the life of the logistic unit.	Yes	Animal By Product Transfer Certificate (BPTC), Bill of lading/Air Waybill, Export clearance documentation, Meat Messaging Consignment Report, Meat Transfer Certificate (MTC)	For more information visit the GS1 website.
Contract number	This is a unique number allocated to the contract by the seller.	Yes	Delivery Docket/Manifest	
Count of Pallets	This is the number of pallets in the logistic unit e.g., container system unit.	Yes	Meat Messaging Consignment Report	
Count of Trade Items	Usually encoded in the GS1 barcode, this is the number of trade items e.g., cartons in the logistic unit.	Yes	Bill of lading/Air Waybill, Delivery Docket/Manifest, Meat Messaging Consignment Report	For more information visit the GS1 website.
Date	This is the date of signing or of which a record entry or transaction was made.	Yes	Animal By Product Transfer Certificate (BPTC), Bill of lading/Air Waybill, Certificate of Analysis (COA), Delivery Docket/Manifest, Export clearance documentation, Meat Messaging Consignment Report, Meat Transfer Certificate (MTC), Receipt of purchase/Tax Invoice	
Delivery Docket/Manifest number	This is a unique number allocated to the docket for identification purposes.	Yes	Delivery Docket/Manifest	
Export Health Certificate Number	A unique number allocated to the health certificate issued for the export consignment for traceability purposes.	Yes	Export Health Certificate, Meat Messaging Consignment Report	For more information visit the Department of Agriculture, Water and the Environment website.
Export Permit Number	A unique permit number is allocated for the export consignment following submission of a correct and	Yes	Export Permit	For more information visit the Department of

From Establishment number	 validated Request For Permit (RFP) which is then approved by the Secretary. A number issued by Federal and State Authorities to identify the originating site from which meat or meat products were distributed to domestic or export markets. For transfer certificates, the Establishment numbers for both the dispatching and receiving 	Yes	Animal By Product Transfer Certificate (BPTC), Certificate of Analysis (COA), Delivery Docket/Manifest, Export clearance documentation, Export Health Certificate, Meat Messaging Consignment Report, Meat	Agriculture, Water and the Environment website.
Global Trade Item Number (GTIN)	establishments are recorded. Encoded in the GS1 barcode, the GTIN is a globally unique 14-digit number used to identify trade items, products, or services.	Yes	Transfer Certificate (MTC) Meat Messaging Consignment Report	For more information visit the GS1 website.
Movement date	The date on which livestock or other products (e.g., feed or meat products) were transported between PICs/establishments.	Yes	Animal By Product Transfer Certificate (BPTC), Bill of lading/Air Waybill, Certificate of Analysis (COA), Delivery Docket/Manifest, Export clearance documentation, Export Health Certificate, Meat Transfer Certificate (MTC)	
MSA Licence Number	Any establishment consigning, supplying, or identifying MSA Certified Product must be registered and have a unique MSA Licence Number.	Yes	Receipt of purchase/Tax Invoice	<u>For more</u> <u>information on</u> <u>MSA visit the</u> <u>MLA website.</u>
Net Weight (Kilograms)	Usually encoded in the GS1 barcode, the Net Weight is a variable measure of the trade item e.g., carton, pallet or shipment recorded in kilograms.	Yes	Bill of lading/Air Waybill, Export Health Certificate, Meat Messaging Consignment Report	For more information visit the GS1 website.
Order date	This is the date on which the purchase order or contract was raised by the buyer.	Yes	Delivery Docket/Manifest	
Packaging Date	Encoded in the GS1 barcode, the Packaging Date is the date on which the item was	Yes	Certificate of Analysis (COA)	For more information

Packaging Date Range	packaged and is recorded in the format year, month, day (YYMMDD). This includes the oldest and newest packaging dates for the	Yes	Export clearance documentation	visit the GS1 website.
0	logistic unit.			
Pallet Serial Shipping Container Code (SSCC)	Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., pallet that is assigned by the establishment constructing the unit. The SSCC remains the same for the life of the logistic unit.	Yes	Animal By Product Transfer Certificate (BPTC), Export clearance documentation, Meat Messaging Consignment Report, Meat Transfer Certificate (MTC)	For more information visit the GS1 website.
Production Date (YYMMDD)	Encoded in the GS1 barcode, this is the 'kill' or slaughter' date of the product and is recorded in the format year, month, day (YYMMDD).	Yes	Animal By Product Transfer Certificate (BPTC), Certificate of Analysis (COA), Meat Transfer Certificate (MTC)	For more information visit the GS1 website.
Recipient Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Receipt of purchase/Tax Invoice	For more information visit the ATO website.
Seal Serial Number	This is a unique serial number printed on any tamper-evident seal issued by the Department.	Yes	Animal By Product Transfer Certificate (BPTC), Bill of lading/Air Waybill, Export clearance documentation, Meat Transfer Certificate (MTC), Official seal	For more information visit the GS1 website.
Seller/Supplier Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Receipt of purchase/Tax Invoice	For more information visit the ATO website.
Shipping Mark	Also known as a port mark, this is a code comprising of three letters representing the foreign establishment number and the last nine digits of the consignment SSCC.	Yes	Bill of lading/Air Waybill, Certificate of Analysis (COA), Delivery Docket/Manifest, Export Health Certificate, Meat Messaging Consignment Report	
To Establishment number	A number issued by Federal and State Authorities to identify the originating site from which meat or meat products were	Yes	Animal By Product Transfer Certificate (BPTC), Export clearance documentation,	

	distributed to domestic or export markets. For transfer certificates, the Establishment numbers for both the dispatching and receiving establishments are recorded.		Meat Transfer Certificate (MTC)	
Trade description	This is a collective set of words that says what the product is and may include information such as species, net weight of product, name and address of establishments, category ciphers, market endorsements, MSA eating quality etc.	Yes	Animal By Product Transfer Certificate (BPTC), Delivery Docket/Manifest, Export clearance documentation, Export Health Certificate, Meat Messaging Consignment Report, Meat Transfer Certificate (MTC)	
Transfer Certificate number	A unique certificate number issued for traceability purposes.	Yes	Animal By Product Transfer Certificate (BPTC), Meat Messaging Consignment Report, Meat Transfer Certificate (MTC)	
Transport registration number	The registration number of the vehicle in which the animals or product were transported. For shipments of product this will be a shipping container number.	Yes	Animal By Product Transfer Certificate (BPTC), Bill of lading/Air Waybill, Delivery Docket/Manifest, Export clearance documentation, Export Health Certificate, Meat Messaging Consignment Report, Meat Transfer Certificate (MTC)	

5.2.5.3.3 Physical Outputs including Critical Tracking Events (CTEs)

Container system units, which contain packaged meat product, are the physical outputs of the export system. Critical Tracking Event related documentation such as the Bill of lading/Air Waybill, as well as Export Health Certificate and Certificate of Analysis, must accompany the movement of product to an importing country.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with the outputs of the export system include the movement of:

- * Container System Unit (meat and meat products)
- * Container System Unit (render and hide product)

off the property, premises, or supply chain sector.

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Container System Unit (meat and meat products)	A container designed for use as a unit of cargo handling equipment in the transport of goods by aircraft or ship.	Bill of lading/Air Waybill, Delivery Docket/Manifest, Export Health Certificate, Export Permit, Meat Messaging Consignment Report, Meat Transfer Certificate (MTC), Official seal, Receipt of purchase/Tax Invoice, Certificate of Analysis (COA)	
Container System Unit (render and hide product)	A container designed for use as a unit of cargo handling equipment in the transport of goods by aircraft or ship.	Animal By Product Transfer Certificate (BPTC), Bill of lading/Air Waybill, Delivery Docket/Manifest, Export clearance documentation, Export Permit, Meat Messaging Consignment Report, Certificate of Analysis (COA), Receipt of purchase/Tax Invoice	

Table 136. Physical outputs and associated Critical Tracking Event related documents for a beef export system.

5.2.5.3.4 Information Outputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). Information outputs from the export system are those KDEs which can be drawn from CTE documentation. These may include document numbers for documents such as the Bill of lading/Air Waybill, Meat Transfer Certificate and Certificate of Analysis as well as other product specific information.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Analysis Date	This is the date on which a product sample was analysed.	Yes	Certificate of Analysis (COA)	
Bill of lading/Air Waybill document number	A unique document number issued for traceability purposes.	Yes	Bill of lading/Air Waybill, Certificate of Analysis (COA)	
Certificate of Analysis number	A unique certificate number issued for traceability purposes.	Yes	Certificate of Analysis (COA)	
COA test lot identifier	This is a unique identifier allocated to all cartons, pallets, and shipping containers for which an analysis sample represents.	Yes	Certificate of Analysis (COA)	

Table 137. Information outputs, Key Data Elements and Critical Tracking Event related documentation for a beef export system.

Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Bill of lading/Air Waybill, Certificate of Analysis (COA), Receipt of purchase/Tax Invoice	
Consignment Serial Shipping Container Code (SSCC)	Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., shipment/message that is assigned by the establishment constructing the unit. The SSCC remains the same for the life of the logistic unit.	Yes	Animal By Product Transfer Certificate (BPTC), Bill of lading/Air Waybill, Export clearance documentation, Meat Messaging Consignment Report, Meat Transfer Certificate (MTC)	For more information visit the GS1 website.
Contract number	This is a unique number allocated to the contract by the seller.	Yes	Delivery Docket/Manifest	
Count of Pallets	This is the number of pallets in the logistic unit e.g., container system unit.	Yes	Meat Messaging Consignment Report	
Count of Trade Items	Usually encoded in the GS1 barcode, this is the number of trade items e.g., cartons in the logistic unit.	Yes	Bill of lading/Air Waybill, Delivery Docket/Manifest, Meat Messaging Consignment Report	For more information visit the GS1 website.
Date	This is the date of signing or of which a record entry or transaction was made.	Yes	Animal By Product Transfer Certificate (BPTC), Bill of lading/Air Waybill, Certificate of Analysis (COA), Delivery Docket/Manifest, Export clearance documentation, Meat Messaging Consignment Report, Meat Transfer Certificate (MTC), Receipt of purchase/Tax Invoice	
Delivery Docket/Manifest number	This is a unique number allocated to the docket for identification purposes.	Yes	Delivery Docket/Manifest	
Export Health Certificate Number	A unique number allocated to the health certificate issued for the export consignment for traceability purposes.	Yes	Export Health Certificate, Meat Messaging Consignment Report	For more information visit the Department of Agriculture, Water and the

				Environment website.
Export Permit Number	A unique permit number is allocated for the export consignment following submission of a correct and validated Request For Permit (RFP) which is then approved by the Secretary.	Yes	Export Permit	For more information visit the Department of Agriculture, Water and the Environment website.
From Establishment number	A number issued by Federal and State Authorities to identify the originating site from which meat or meat products were distributed to domestic or export markets. For transfer certificates, the Establishment numbers for both the dispatching and receiving establishments are recorded.	Yes	Animal By Product Transfer Certificate (BPTC), Certificate of Analysis (COA), Delivery Docket/Manifest, Export clearance documentation, Export Health Certificate, Meat Messaging Consignment Report, Meat Transfer Certificate (MTC)	
Global Trade Item Number (GTIN)	Encoded in the GS1 barcode, the GTIN is a globally unique 14-digit number used to identify trade items, products, or services.	Yes	Meat Messaging Consignment Report	For more information visit the GS1 website.
Movement date	The date on which livestock or other products (e.g., feed or meat products) were transported between PICs/establishments.	Yes	Animal By Product Transfer Certificate (BPTC), Bill of lading/Air Waybill, Certificate of Analysis (COA), Delivery Docket/Manifest, Export clearance documentation, Export Health Certificate, Meat Transfer Certificate (MTC)	
MSA Licence Number	Any establishment consigning, supplying, or identifying MSA Certified Product must be registered and have a unique MSA Licence Number.	Yes	Receipt of purchase/Tax Invoice	<u>For more</u> <u>information on</u> <u>MSA visit the</u> <u>MLA website.</u>
Net Weight (Kilograms)	Usually encoded in the GS1 barcode, the Net Weight is a variable measure of the trade item e.g., carton, pallet or shipment recorded in kilograms.	Yes	Bill of lading/Air Waybill, Export Health Certificate, Meat Messaging Consignment Report	For more information visit the GS1 website.

Order date	This is the date on which the purchase order or contract was raised by the buyer.	Yes	Delivery Docket/Manifest	
Packaging Date	Encoded in the GS1 barcode, the Packaging Date is the date on which the item was packaged and is recorded in the format year, month, day (YYMMDD).	Yes	Certificate of Analysis (COA)	For more information visit the GS1 website.
Packaging Date Range	This includes the oldest and newest packaging dates for the logistic unit.	Yes	Export clearance documentation	
Pallet Serial Shipping Container Code (SSCC)	Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., pallet that is assigned by the establishment constructing the unit. The SSCC remains the same for the life of the logistic unit.	Yes	Animal By Product Transfer Certificate (BPTC), Export clearance documentation, Meat Messaging Consignment Report, Meat Transfer Certificate (MTC)	For more information visit the GS1 website.
Production Date (YYMMDD)	Encoded in the GS1 barcode, this is the 'kill' or slaughter' date of the product and is recorded in the format year, month, day (YYMMDD).	Yes	Animal By Product Transfer Certificate (BPTC), Certificate of Analysis (COA), Meat Transfer Certificate (MTC)	For more information visit the GS1 website.
Recipient Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Receipt of purchase/Tax Invoice	For more information visit the ATO website.
Seal Serial Number	This is a unique serial number printed on any tamper-evident seal issued by the Department.	Yes	Animal By Product Transfer Certificate (BPTC), Bill of lading/Air Waybill, Export clearance documentation, Meat Transfer Certificate (MTC), Official seal	For more information visit the GS1 website.
Seller/Supplier Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Receipt of purchase/Tax Invoice	For more information visit the ATO website.
Shipping Mark	Also known as a port mark, this is a code comprising of three letters representing the foreign establishment number and the	Yes	Bill of lading/Air Waybill, Certificate of Analysis (COA), Delivery Docket/Manifest, Export Health Certificate, Meat	

	last nine digits of the consignment SSCC.		Messaging Consignment Report	
To Establishment number	A number issued by Federal and State Authorities to identify the originating site from which meat or meat products were distributed to domestic or export markets. For transfer certificates, the Establishment numbers for both the dispatching and receiving establishments are recorded.	Yes	Animal By Product Transfer Certificate (BPTC), Export clearance documentation, Meat Transfer Certificate (MTC)	
Trade description	This is a collective set of words that says what the product is and may include information such as species, net weight of product, name and address of establishments, category ciphers, market endorsements, MSA eating quality etc.	Yes	Animal By Product Transfer Certificate (BPTC), Delivery Docket/Manifest, Export clearance documentation, Export Health Certificate, Meat Messaging Consignment Report, Meat Transfer Certificate (MTC)	
Transfer Certificate number	A unique certificate number issued for traceability purposes.	Yes	Animal By Product Transfer Certificate (BPTC), Meat Messaging Consignment Report, Meat Transfer Certificate (MTC)	For more information visit the Department of Agriculture, Water and the Environment website.
Transport registration number	The registration number of the vehicle in which the animals or product were transported. For shipments of product this will be a shipping container number.	Yes	Animal By Product Transfer Certificate (BPTC), Bill of lading/Air Waybill, Delivery Docket/Manifest, Export clearance documentation, Export Health Certificate, Meat Messaging Consignment Report, Meat Transfer Certificate (MTC)	

- 5.2.5.3.5 Regulatory and Industry Programs
- * Meat Standards Australia (MSA)
- * AUS-MEAT
- * Department of Agriculture
- * Export Documentation System (EXDOC)
- * Meat Messaging
- * Other data sources

5.2.5.3.6 Supply Chain Node Traceability

The traceability of product undergoing export/importation back to the live animal and property of origin is dependent on the form (carcase, carton, pallet or render store bag subunits) in which the product is being exported/imported. All container system units undergoing export must be accompanied by a Meat Messaging Consignment Report and a Meat Transfer Certificate (MTC) or Animal By Product Transfer Certificate (BPTC). The Consignment Report is issued to the buyer of product and lists all the logistic unit and subunit unique serialised identifiers contained within the Container System Unit including the Consignment Serial Shipping Container Code (SSCC), Pallet Serial Shipping Container Code, and scanned and verified carton label serial identifiers. Additionally, the Transfer Certificate details the serialised logistic unit identifiers such as the Serial Shipping Container Code (SSCC). These documents allow traceability of the unit and its subunits back to either the live animal and property of origin (for carcases) or processor production run (for cartons and palletised meat and meat products).

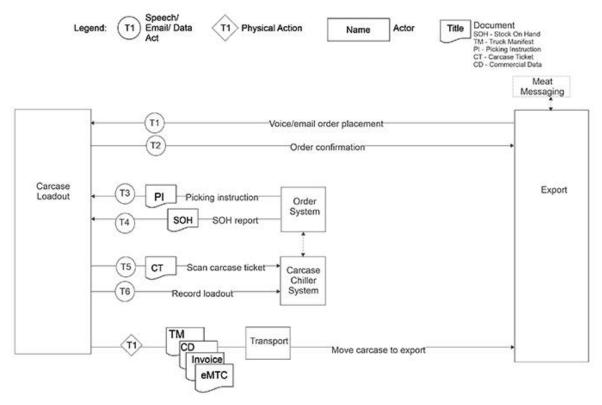
For traceability information pertaining to render and hide products please refer to 'Supply Chain Node Traceability' under each of these nodes. For carton and carcase products please refer to Boning Room and Carcase Chiller 'Supply Chain Node Traceability' respectively.

Direction	Description
Input	Cold Store (Carcase) to Export
Input	Cold Store (Carton) to Export
Input	Third Party Cold Store to Export
Input	Value Added to Export
Input	Render to Export
Input	Hides to Export
Output	Export to Import Inspection Facility

5.2.5.3.7 Data flow diagrams

Table 138. Data flow diagrams for the inputs and outputs of a beef export s	
	/stem.

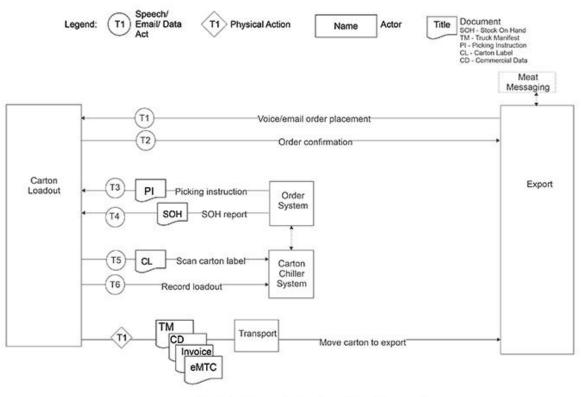
5.2.5.3.7.1 Cold Store (Carcase) to Export



Cold Store (Carcase) to Export

Figure 157. Data or information flows from the cold store (carcase) to export systems in the beef supply chain.

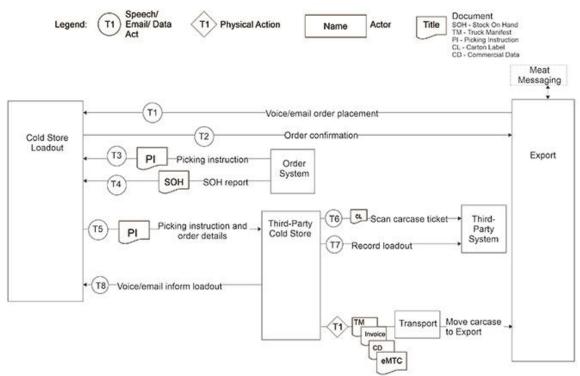




Cold Store (Carton) to Export

Figure 158. Data or information flows from the cold store (carton) to export systems in the beef supply chain.

5.2.5.3.7.3 Third Party Cold Store to Export



Third-Party Cold Store to Export

Figure 159. Data or information flows from the third-party cold store to export systems in the beef supply chain.

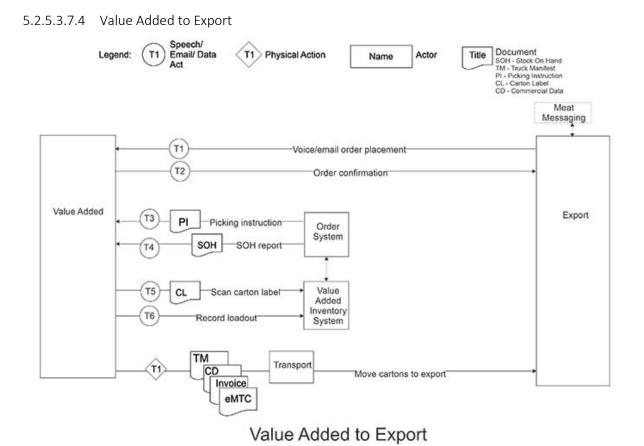
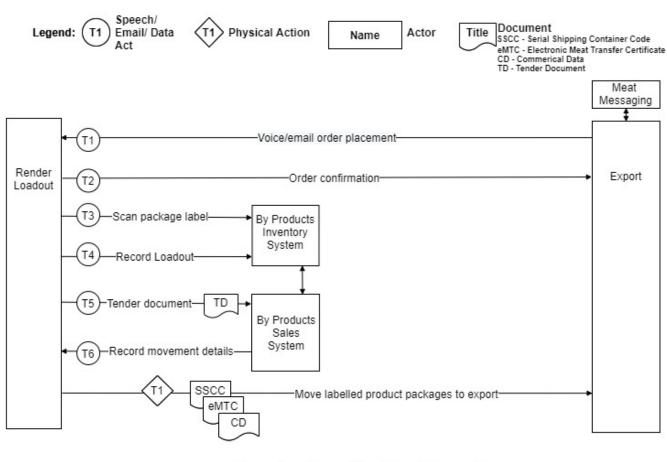


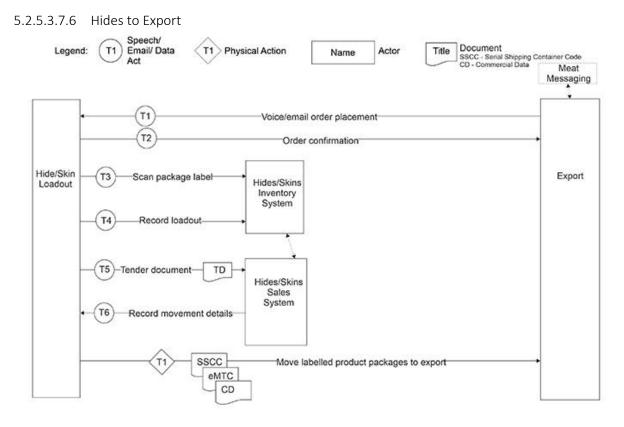
Figure 160. Data or information flows from the value-added to export systems in the beef supply chain.

5.2.5.3.7.5 Render to Export



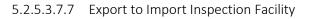
Render Loadout to Export

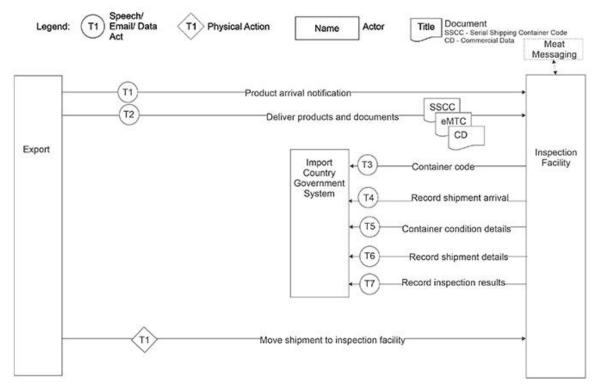
Figure 161. Data or information flows from the render loadout to export systems in the beef supply chain.



Hide/Skin Loadout to Export

Figure 162. Data or information flows from the hide/skin loadout to export systems in the beef supply chain.





Export to Inspection Facility

Figure 163. Data or information flows from the export to import inspection facility systems in the beef supply chain.

5.2.6 Importing Country - National distribution

5.2.6.1 Import finishing – grass

Grass-finished animals are those which are typically fed entirely on grass-derived forage such as annual or perennial grasses, crops in the vegetative stage, hay, or silage. These animals are not fed a grain-based diet such as that provided in a feedlot system. The requirements of a grass-finishing system are usually determined by the target market. Grass finishing systems may also require feeding supplements for nutritional, efficiency, and production purposes to be provided to livestock.

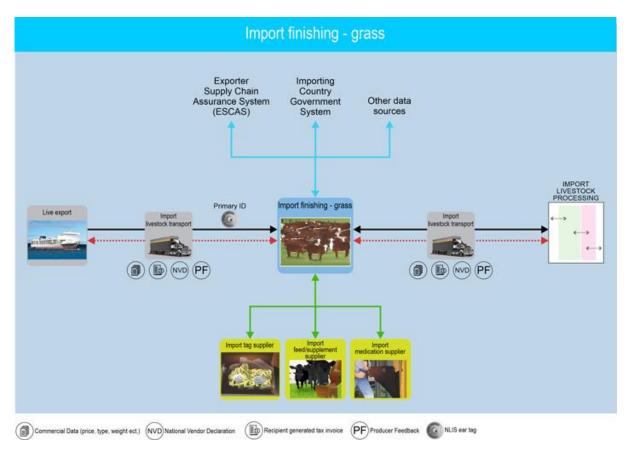


Figure 164. Inputs and outputs of the beef supply chain import finishing (grass/pasture) sector.

5.2.6.1.1 Physical Inputs including Critical Tracking Events (CTEs)

Inputs for the grass finishing component of the beef cattle supply chain are largely the same as for the breeding and backgrounding sectors and include the cattle, any veterinary input or commercial services, veterinary drugs and health treatments, crop and pasture treatments and any feed supplements.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with inputs to the import grass finishing system include the receival of:

- * Cattle
- * Crop and pasture treatments
- * Experts and veterinarians
- * Feed supplies and supplements
- * Veterinary drugs or other health treatments.

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Cattle	These are bovine livestock and may include any type of cattle e.g., cull cattle, calves etc.	Exporter/Importer Agreement, Import feed and water record, Import Permit, Livestock Export Health Certificate, Veterinary Services Form/Import release, Import Receipt	

Table 139. Physical inputs and associated Critical Tracking Event related documents for a beef import finishing (grass/pasture) system.

		of purchase/Tax Invoice, Import specific livestock movement forms
Crop and	These are agricultural chemicals applied to	Import Receipt of purchase/Tax
pasture	crops, pastures and/or paddocks (inclusive	Invoice
treatments	of spot spraying) which livestock may	
	come into contact with or consume.	
Experts and	These are professionals who provide	Import Receipt of purchase/Tax
veterinarians	services to the breeding enterprise which	Invoice, Veterinary prescription
	ensure the safety, wellbeing, and	
	productivity of the livestock.	
Feed supplies	These are supplementary animal feed	Import specific commodity
and	products such as hay or silage fodder, or	movement forms, Import Receipt of
supplements	mineral supplements which are provided	purchase/Tax Invoice
	to ensure the production efficiency and	
	health of livestock are maintained. This	
	may also include clean drinking water e.g.,	
	where livestock are in transit or at	
	saleyards.	
Veterinary	These may be prescribed, or non-	Import Receipt of purchase/Tax
drugs or other	prescribed treatments or medications	Invoice, Veterinary prescription
health	given to ensure the health and wellbeing	
treatments	of the livestock.	

5.2.6.1.2 Information Inputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). There are a range of measurements that are related to the inputs of a finishing system. These include the source of the cattle, transport details, and any vaccinations or other treatments that the cattle have undergone. The importer of exported livestock must demonstrate that these livestock remain traceable throughout the supply chain up to the point of slaughter. Livestock must therefore be effectively identified, and all movements recorded to allow traceability back to the property of birth in the exporting country i.e., Australia. This requires import specific livestock movement forms to be completed and kept for traceability records.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
APVMA approval number	This is a unique number allocated to each label by the APVMA.	Yes	Livestock Export Health Certificate	For more information visit the Australian Pesticides and Veterinary Medicine Authority.
Batch number	This is a unique number which identifies products sharing certain production characteristics and is used for traceability purposes.	Yes	Livestock Export Health Certificate	
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Import feed and water record, Import Receipt of purchase/Tax Invoice	

Table 140. Information inputs, Key Data Elements and Critical Tracking Event related documentation for a beef import finishing (grass/pasture) system.

Contract must be	This is a unique sough a sufficient of	Ver		,
Contract number	This is a unique number allocated to	Yes	Exporter/Importer	
	the contract by the seller.		Agreement, Import	
			specific commodity	
			movement forms	
Customs Entry	A unique number assigned to an	Yes	Veterinary Services	
number	entry document and issued to		Form/Import release	
	importation shipments by customs			
	for identification purposes.			
Date	This is the date of signing or of	Yes	Exporter/Importer	
	which a record entry or transaction		Agreement, Import feed	
	was made.		and water record, Import	
			Receipt of purchase/Tax	
			Invoice, Import specific	
			commodity movement	
			forms, Import specific	
			livestock movement	
			forms, Livestock Export	
			Health Certificate	
Export Health	A unique number allocated to the	Yes	Livestock Export Health	For more
Certificate Number	health certificate issued for the	res	Certificate	information
			Certificate	visit the
	export consignment for traceability			Department of
	purposes.			Agriculture, Water and the
				Environment
				website.
Export Premises	A unique number issued to	Yes	Livestock Export Health	For more
Registration number	Australian Government approved		Certificate	information visit the
	quarantine premises where			Department of
	livestock are prepared for export.			Agriculture,
				Water and the
				Environment website.
From Port Code	Any location used in international	Yes	Livestock Export Health	For more
	trade and transport (e.g., seaport,		Certificate	information
	airports etc.) are issued with an			visit the
	identification code.			Department of Agriculture,
				Water and the
				Environment
_				website.
From property	The identification of the property	Yes	Import specific	
identifier	(may be a PIC) from/to where the		commodity movement	
	livestock or product were		forms, Import specific	
	consigned.		livestock movement	
			forms	
Import Permit	A unique permit number is	Yes	Import Permit, Veterinary	
Number	allocated for the import		Services Form/Import	
	consignment following submission		release	
	of correct and validated			
	documentation approved by the			
	importing country.			
Livestock Export	A unique licence number is	Yes	Exporter/Importer	For more
Licence Holder	allocated to exporters of livestock		Agreement, Livestock	information
number	for a period of one to five years		Export Health Certificate	visit the Department of
	following submission of a correct			Agriculture,
	documentation which is then			Water and the
	approved by the Secretary.			Environment
				website.

Livestock Identifier	The importer of exported livestock must demonstrate that these	Yes	Import specific livestock movement forms	
	livestock remain traceable throughout the supply chain up to the point of slaughter. Livestock			
	must be effectively identified, and			
	all movements recorded to allow			
	traceability back to the property of			
	birth in the exporting country.			
Livestock movement	A unique certificate number issued	Yes	Import specific livestock	
form serial number	for traceability purposes.		movement forms	
Movement date	The date on which livestock or	Yes	Exporter/Importer	
	other products (e.g., feed or meat		Agreement, Import	
	products) were transported		specific commodity	
	between PICs/establishments.		movement forms, Import	
			specific livestock	
			movement forms,	
			Livestock Export Health Certificate, Veterinary	
			Services Form/Import	
			release	
NLIS Tag	All animals transported between	Yes	Livestock Export Health	For more
Number/RFID	PICs must have a permanent		Certificate	information
	National Livestock Identification			visit the Integrity
	System tag attached. This tag has a			systems
	unique animal identification			website.
	number.			
Prescription number	A unique certificate number issued	Yes	Veterinary prescription	
	for traceability purposes.			
Product	This is a unique identifier or	Yes	Import specific	
code/description	description assigned by the seller to		commodity movement	
	each product type marketed or for		forms	
Quarantine date	sale. This is the date range identifying a	Yes	Livestock Export Health	For more
range	period in time in which livestock	163	Certificate	information
Tunge	were quarantined directly prior to			visit the Department of
	exportation.			Agriculture,
				Water and the
				Environment website.
Recipient Business	This is a unique registration	Yes	Import feed and water	
Number	number, used to identify		record Import, Receipt of	
	businesses.		purchase/Tax Invoice	
Seller/Supplier	This is a unique registration	Yes	Import feed and water	
Business Number	number, used to identify		record Import, Receipt of	
	businesses.		purchase/Tax Invoice	
To Port Code	Any location used in international	Yes	Livestock Export Health	For more information
	trade and transport (e.g., seaport,		Certificate, Veterinary	visit the
	airports etc.) are issued with an identification code.		Services Form/Import	Department of Agriculture,
			release	Water and the
				Environment
To property	The identification of the property	Yes	Import specific	website.
identifier	(may be a PIC) from/to where the		commodity movement	
mentiner		1		

	livestock or product were consigned.		forms, Import specific livestock movement forms
Transport registration number	The registration number of the vehicle in which the animals or product were transported.	Yes	Import specific livestock movement forms, Livestock Export Health Certificate, Veterinary Services Form/Import release
Treatment date	The date on which a treatment or product was applied to a unit e.g., paddock, animal, fodder etc.	Yes	Import feed and water record, Livestock Export Health Certificate
Veterinary Registration Number	A unique number issued to veterinarians who are registered to practice, under the state legislative requirements, within the state in which they reside.	Yes	Livestock Export Health Certificate, Veterinary prescription

5.2.6.1.3 Physical Outputs including Critical Tracking Events (CTEs)

The outputs from a grass finishing system are cattle that have been prepared for slaughter and are moved directly to a processor. There is information about each animal that should be made available to this next link in the supply chain. This information is normally passed forward on import specific livestock movement documents.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with the outputs of the import grass finishing system include the movement of: * Cattle

off the property, premises, or supply chain sector.

Table 141. Physical outputs and associated Critical Tracking Event related documents for a beef import finishing (grass/pasture) system.

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Cattle	These are bovine livestock and may include any type of cattle e.g., cull cattle, calves etc.	Commercial supply contract, Import feed and water record, Import specific livestock movement forms, Import Receipt of purchase/Tax Invoice	

5.2.6.1.4 Information Outputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). Information passed forward to the next link in the supply chain from a grass finishing system is derived from regulated documents such as import specific livestock movement forms or other records such as feed and water records or commercial supply contracts.

Table 142. Information outputs, Key Data Elements and Critical Tracking Event related documentation for a beef import finishing (grass/pasture) system.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Agreement date	This is the date on which an agreement	Yes	Commercial supply	
0	between two parties was made.		contract	
Company/product	This is an in-house code for the identification of	Yes	Import feed and	
code	the product in the unit.		water record Import, Receipt of purchase/Tax Invoice	
Date	This is the date of signing or of which a record entry or transaction was made.	Yes	Commercial supply contract, Import feed and water record, Import Receipt of purchase/Tax Invoice, Import specific livestock movement forms	
From property identifier	The identification of the property (may be a PIC) from/to where the livestock or product were consigned.	Yes	Import specific livestock movement forms	
Livestock Identifier	The importer of exported livestock must demonstrate that these livestock remain traceable throughout the supply chain up to the point of slaughter. Livestock must be effectively identified, and all movements recorded to allow traceability back to the property of birth in the exporting country.	Yes	Import specific livestock movement forms	
Livestock movement form serial number	A unique certificate number issued for traceability purposes.	Yes	Import specific livestock movement forms	
Movement date	The date on which livestock or other products (e.g., feed or meat products) were transported between PICs/establishments.	Yes	Commercial supply contract, Import specific livestock movement forms	
Recipient Business Number	This is a unique registration number, used to identify businesses.	Yes	Import feed and water record Import, Receipt of purchase/Tax Invoice	
Seller/Supplier Business Number	This is a unique registration number, used to identify businesses.	Yes	Import feed and water record Import, Receipt of purchase/Tax Invoice	
To property identifier	The identification of the property (may be a PIC) from/to where the livestock or product were consigned.	Yes	Import specific livestock movement forms	

Transport registration number	The registration number of the vehicle in which the animals or product were transported.	Yes	Import specific livestock movement forms	
Treatment date	The date on which a treatment or product was applied to a unit e.g., paddock, animal, fodder etc.	Yes	Import feed and water record	

5.2.6.1.5 Regulatory and Industry Programs

- * Exporter Supply Chain Assurance System (ESCAS)
- * Importing Country Government System
- * Other data sources

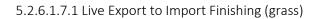
5.2.6.1.6 Supply Chain Node Traceability

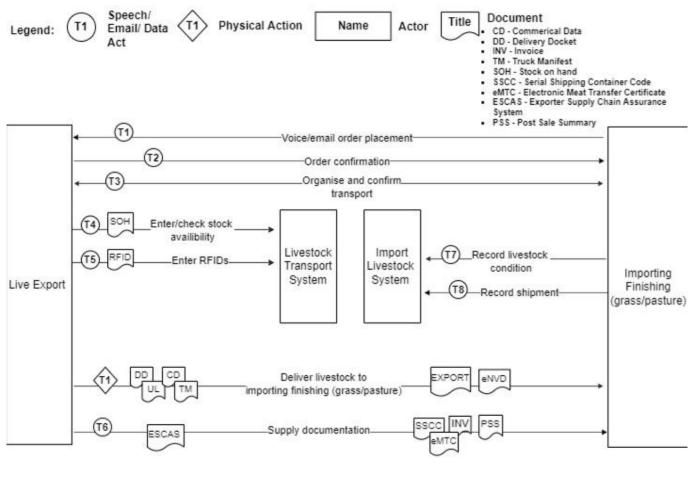
The National Livestock Identification System (NLIS) is the Australian livestock traceability program which is administered by Integrity Systems Company (ISC). Where stipulated by State legislation and certain export markets, the NLIS system requires all animals bought, sold, and moved along the supply chain to be tagged with an accredited NLIS ID tag. Each tag has an NLIS tag number or Radio Frequency Identifier (RFID) for the traceability of the animal throughout its lifetime. Every property which holds livestock must have a Property Identification Code (PIC) to which the livestock are assigned in the NLIS Database. Each time livestock are transferred between PICs within Australia they must be accompanied by a livestock movement declaration, such as the National Vendor Declaration (NVD) form. This document typically outlines the transporter details, consignment details, compliance with intended market specifications, withholding periods, and the details of the new property PIC. All livestock movements between PICs require an NLIS movement update to be made by either or both the consigner and receiver. Where NLIS ID tags are lost livestock must be issued with a new post-breeder tag if not on the PIC of birth and this reconciled in the NLIS Database. For animals loaded for live export, it is the exporters responsibility to ensure that all livestock are transferred from the port PIC to EEEEEEEE (8Es) which signifies that livestock have been exported. The importer of exported livestock must demonstrate that these livestock remain traceable throughout the supply chain up to the point of slaughter. Livestock must be effectively identified, and all movements recorded to allow traceability back to the property of birth in the exporting country i.e., Australia.

5.2.6.1.7 Data flow diagrams

Direction	Description
Input	Live export to Import Finishing (grass)
Input	Import Finishing (grass) to Import Livestock Processing

Table 143. Data flow diagrams for the inputs and outputs of beef importing finishing system





Live Export to Importing Finishing (grass/pasture)

Figure 165. Data or information flows from live exprt to import finishing (grass/pasture) systems in the beef supply chain

5.2.6.1.7.2 Import Finishing (grass) to Import Livestock Processing

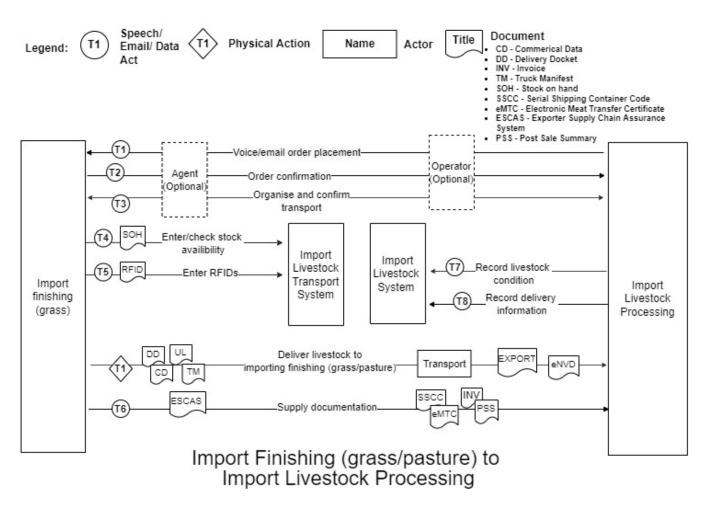


Figure 166. Data or information flows from the import finishing (grass/pasture) to import livestock processing systems in the beef supply chain.

5.2.6.2 Import finishing – grain

Grain-finished animals are those which have been fed on a grain-based ration in a feedlot system. This system is typically comprised of several confined yard areas, with watering and feeding facilities, in which livestock are held. Grain rations are typically of higher quality than grass pasture and therefore improve the live weight gain of animals. Grain feeding systems typically produce product with greater eating quality, enable the specific needs of niche markets to be met, and allow for a more consistent supply of fodder to meet the energy demands of the growing animal.

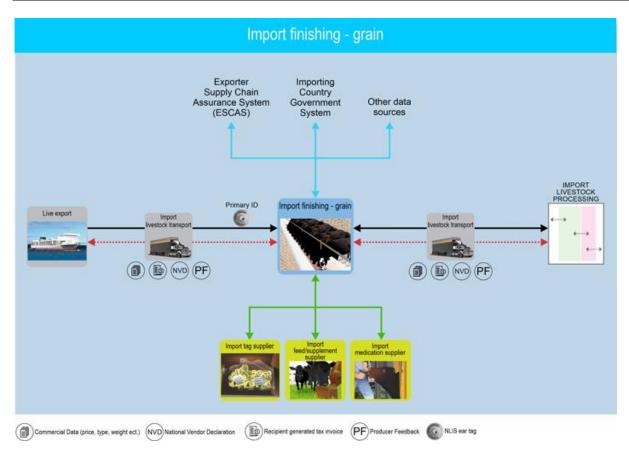


Figure 167. Inputs and outputs of the beef supply chain import finishing (grain) sector.

5.2.6.2.1 Physical Inputs including Critical Tracking Events (CTEs)

The physical inputs to a grain finishing system are similar as for that of a pasture finishing system. However, those inputs related to crop and pasture treatments are not required.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with inputs to the import grain finishing system include the receival of:

- * Cattle
- * Experts and veterinarians
- * Feed supplies and supplements
- * Veterinary drugs or other health treatments.

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Cattle	These are bovine livestock and may include	Exporter/Importer Agreement,	
	any type of cattle e.g., cull cattle, calves etc.	Import feed and water record,	
		Import Permit, Livestock Export	
		Health Certificate, Veterinary	
		Services Form/Import release,	
		Import Receipt of purchase/Tax	

Table 144. Physical inputs and associated Critical Tracking Event related documents for a beef import finishing (grain) system.

		Invoice, Import specific livestock movement forms
Experts and veterinarians	These are professionals who provide services to the breeding enterprise which	Import Receipt of purchase/Tax Invoice, Veterinary prescription
	ensure the safety, wellbeing, and productivity of the livestock.	
Feed supplies and supplements	These are supplementary animal feed products such as hay or silage fodder, or mineral supplements which are provided to ensure the production efficiency and health of livestock are maintained. This may also include clean drinking water e.g., where livestock are in transit or at saleyards.	Import specific commodity movement forms, Import Receipt of purchase/Tax Invoice
Veterinary drugs or other health treatments	These may be prescribed, or non-prescribed treatments or medications given to ensure the health and wellbeing of the livestock.	Import Receipt of purchase/Tax Invoice, Veterinary prescription

5.2.6.2.2 Information Inputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). There are a range of measurements that are related to the inputs of a finishing system. These include the source of the cattle, transport details, and any vaccinations or other treatments that the cattle have undergone. The importer of exported livestock must demonstrate that these livestock remain traceable throughout the supply chain up to the point of slaughter. Livestock must therefore be effectively identified, and all movements recorded to allow traceability back to the property of birth in the exporting country i.e., Australia. This requires import specific livestock movement forms to be completed and kept for traceability records.

Table 145. Information inputs, Key Data Elements and Critical Tracking Event related documentation for a beef import finishing (grain) system.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
APVMA approval number	This is a unique number allocated to each label by the APVMA.	Yes	Livestock Export Health Certificate	For more information visit the Australian Pesticides and Veterinary Medicine Authority.
Batch number	This is a unique number which identifies products sharing certain production characteristics and is used for traceability purposes.	Yes	Livestock Export Health Certificate	
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Import feed and water record, Import Receipt of purchase/Tax Invoice	
Contract number	This is a unique number allocated to the contract by the seller.	Yes	Exporter/Importer Agreement, Import specific commodity movement forms	

Customs Entry	A unique number assigned to an	Yes	Veterinary Services	
number	entry document and issued to	163	Form/Import release	
number	importation shipments by customs			
	for identification purposes.			
Date	This is the date of signing or of	Yes	Exporter/Importer	
	which a record entry or transaction		Agreement, Import feed	
	was made.		and water record, Import	
			Receipt of purchase/Tax	
			Invoice, Import specific	
			commodity movement	
			forms, Import specific	
			livestock movement	
			forms, Livestock Export	
			Health Certificate	
Export Health	A unique number allocated to the	Yes	Livestock Export Health	For more
Certificate Number	health certificate issued for the		Certificate	information
	export consignment for traceability			visit the Department of
	purposes.			Agriculture,
				Water and the
				Environment website.
Export Premises	A unique number issued to	Yes	Livestock Export Health	For more
Registration number	Australian Government approved		Certificate	information visit the
-	quarantine premises where			Department of
	livestock are prepared for export.			Agriculture,
				Water and the
				Environment website.
From Port Code	Any location used in international	Yes	Livestock Export Health	For more
	trade and transport (e.g., seaport,		Certificate	information visit the
	airports etc.) are issued with an			Department of
	identification code.			Agriculture,
				Water and the Environment
				website.
From property	The identification of the property	Yes	Import specific	
identifier	(may be a PIC) from/to where the		commodity movement	
	livestock or product were		forms, Import specific	
	consigned.		livestock movement	
			forms	
Import Permit	A unique permit number is	Yes	Import Permit, Veterinary	
Number	allocated for the import		Services Form/Import	
	consignment following submission		release	
	of correct and validated			
	documentation approved by the			
	importing country.			_
Livestock Export	A unique licence number is	Yes	Exporter/Importer	For more information
Licence Holder	allocated to exporters of livestock		Agreement, Livestock	visit the
number	for a period of one to five years		Export Health Certificate	Department of
	following submission of a correct			Agriculture,
	documentation which is then			Water and the Environment
	approved by the Secretary.			website.
Livestock Identifier	The importer of exported livestock	Yes	Import specific livestock	
	must demonstrate that these		movement forms	
	livestock remain traceable			
	throughout the supply chain up to			

	1			1
	the point of slaughter. Livestock			
	must be effectively identified, and			
	all movements recorded to allow			
	traceability back to the property of			
	birth in the exporting country.			
Livestock movement	A unique certificate number issued	Yes	Import specific livestock	
form serial number	for traceability purposes.		movement forms	
Movement date	The date on which livestock or	Yes	Exporter/Importer	
	other products (e.g., feed or meat		Agreement, Import	
	products) were transported		specific commodity	
	between PICs/establishments.		movement forms, Import	
			specific livestock	
			movement forms,	
			Livestock Export Health	
			Certificate, Veterinary	
			Services Form/Import	
			release	
NLIS Tag	All animals transported between	Yes	Livestock Export Health	For more
Number/RFID	PICs must have a permanent	105	Certificate	information
Number/Ninb	National Livestock Identification			visit the
	System tag attached. This tag has a			Integrity systems
	unique animal identification			website.
	number.			
Dracarintian number		Vac	Votorinon, procorintion	
Prescription number	A unique certificate number issued	Yes	Veterinary prescription	
Decide at	for traceability purposes.	Maria		
Product	This is a unique identifier or	Yes	Import specific	
code/description	description assigned by the seller to		commodity movement	
	each product type marketed or for		forms	
0	sale.			Formers
Quarantine date	This is the date range identifying a	Yes	Livestock Export Health	For more information
range	period in time in which livestock		Certificate	visit the
	were quarantined directly prior to			Department of
	exportation.			Agriculture, Water and the
				Environment
				website.
Recipient Business	This is a unique registration	Yes	Import feed and water	
Number	number, used to identify		record, Import Receipt of	
	businesses.		purchase/Tax Invoice	
Seller/Supplier	This is a unique registration	Yes	Import feed and water	
Business Number	number, used to identify		record, Import Receipt of	
	businesses.		purchase/Tax Invoice	
To Port Code	Any location used in international	Yes	Livestock Export Health	For more
	trade and transport (e.g., seaport,		Certificate, Veterinary	information
	airports etc.) are issued with an		Services Form/Import	visit the Department of
	identification code.		release	Agriculture,
				Water and the
				Environment website.
To property	The identification of the property	Yes	Import specific	
identifier	(may be a PIC) from/to where the	163	commodity movement	
	livestock or product were		forms, Import specific	
	consigned.		livestock movement	
			forms	

Transport registration number	The registration number of the vehicle in which the animals or product were transported.	Yes	Import specific livestock movement forms, Livestock Export Health Certificate, Veterinary Services Form/Import release
Treatment date	The date on which a treatment or product was applied to a unit e.g., paddock, animal, fodder etc.	Yes	Import feed and water record, Livestock Export Health Certificate
Veterinary Registration Number	A unique number issued to veterinarians who are registered to practice, under the state legislative requirements, within the state in which they reside.	Yes	Livestock Export Health Certificate, Veterinary prescription

5.2.6.2.3 Physical Outputs including Critical Tracking Events (CTEs)

The outputs from a grain finishing system are cattle that have been prepared for slaughter and are moved directly to a processor. There is information about each animal that should be made available to this next link in the supply chain. This information is normally passed forward on import specific livestock movement documents.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with the outputs of the import grain finishing system include the movement of: * Cattle

off the property, premises, or supply chain sector.

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Cattle	These are bovine livestock and may include any type of cattle e.g., cull cattle, calves etc.	Commercial supply contract, Import feed and water record, Import specific livestock movement forms, Import Receipt of purchase/Tax Invoice	

Table 146. Physical outputs and associated Critical Tracking Event related documents for a beef import finishing (grain) system.

5.2.6.2.4 Information Outputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). Information passed forward to the next link in the supply chain from a grain finishing system is derived from regulated documents such as import specific livestock movement forms or other records such as feed and water records or commercial supply contracts.

Table 147. Information outputs, Key Data Elements and Critical Tracking Event related documentation for a beef import finishing (grain) system.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	Critical Tracking Event (CTE) related	More details
		documents	

			(including electronic)
Agreement date	This is the date on which an agreement between two parties was made.	Yes	Commercial supply contract
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Import feed and water record Import, Receipt of purchase/Tax Invoice
Contract number	This is a unique number allocated to the contract by the seller.	Yes	Commercial supply contract
Date	This is the date of signing or of which a record entry or transaction was made.	Yes	Commercial supply contract, Import feed and water record, Import Receipt of purchase/Tax Invoice, Import specific livestock movement forms
From property identifier	The identification of the property (may be a PIC) from/to where the livestock or product were consigned.	Yes	Import specific livestock movement forms
Livestock Identifier	The importer of exported livestock must demonstrate that these livestock remain traceable throughout the supply chain up to the point of slaughter. Livestock must be effectively identified, and all movements recorded to allow traceability back to the property of birth in the exporting country.	Yes	Import specific livestock movement forms
Livestock movement form serial number	A unique certificate number issued for traceability purposes.	Yes	Import specific livestock movement forms
Movement date	The date on which livestock or other products (e.g., feed or meat products) were transported between PICs/establishments.	Yes	Commercial supply contract, Import specific livestock movement forms
Recipient Business Number	This is a unique registration number, used to identify businesses.	Yes	Import feed and water record, Import Receipt of purchase/Tax Invoice
Seller/Supplier Business Number	This is a unique registration number, used to identify businesses.	Yes	Import feed and water record, Import Receipt of purchase/Tax Invoice
To property identifier	The identification of the property (may be a PIC) from/to where the livestock or product were consigned.	Yes	Import specific livestock movement forms
Transport registration number	The registration number of the vehicle in which the animals or product were transported.	Yes	Import specific livestock movement forms

Treatment date	The date on which a treatment or product was applied to a unit e.g., paddock, animal, fodder	Yes	Import feed and water record	
	etc.			

- 5.2.6.2.5 Regulatory and Industry Programs
- * Exporter Supply Chain Assurance System (ESCAS)
- * Importing Country Government System
- * Other data sources

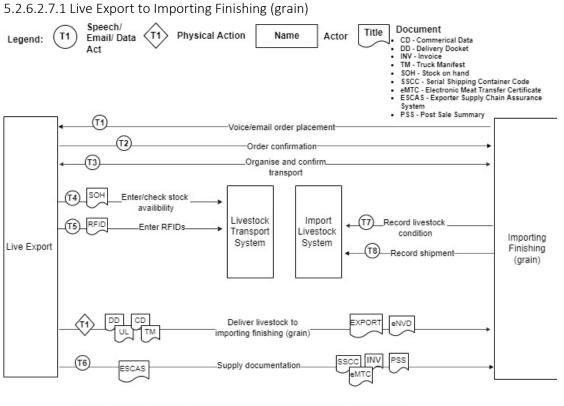
5.2.6.2.6 Supply Chain Node Traceability

The National Livestock Identification System (NLIS) is the Australian livestock traceability program which is administered by Integrity Systems Company (ISC). Where stipulated by State legislation and certain export markets, the NLIS system requires all animals bought, sold, and moved along the supply chain to be tagged with an accredited NLIS ID tag. Each tag has an NLIS tag number or Radio Frequency Identifier (RFID) for the traceability of the animal throughout its lifetime. Every property which holds livestock must have a Property Identification Code (PIC) to which the livestock are assigned in the NLIS Database. Each time livestock are transferred between PICs within Australia they must be accompanied by a livestock movement declaration, such as the National Vendor Declaration (NVD) form. This document typically outlines the transporter details, consignment details, compliance with intended market specifications, withholding periods, and the details of the new property PIC. All livestock movements between PICs require an NLIS movement update to be made by either or both the consigner and receiver. Where NLIS ID tags are lost livestock must be issued with a new post-breeder tag if not on the PIC of birth and this reconciled in the NLIS Database. For animals loaded for live export, it is the exporters responsibility to ensure that all livestock are transferred from the port PIC to EEEEEEEE (8Es) which signifies that livestock have been exported. The importer of exported livestock must demonstrate that these livestock remain traceable throughout the supply chain up to the point of slaughter. Livestock must be effectively identified, and all movements recorded to allow traceability back to the property of birth in the exporting country i.e., Australia.

5.2.6.2.7 Data flow diagrams

Direction	Description
Input	Live export to Import Finishing (grain)
Input	Import Finishing (grain) to Import Livestock Processing

Table 148. Data flow diagrams for the inputs and outputs of a beef import finishing system



Live Export to Importing Finishing (grain)

Figure 168. Data or information flows from the live export to import finishing (grain) systems in the beef supply chain.

5.2.6.2.7.2 Importing Finishing (grain) to Import Livestock Processing

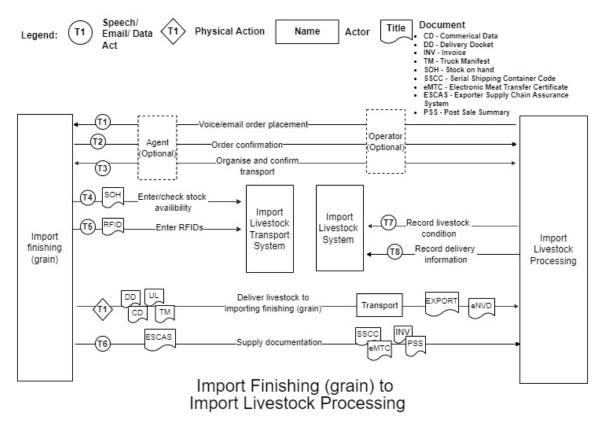


Figure 169. Data or information flows from import finishing (grain) to import livestock processing systems in the beef supply chain.

5.2.6.3 Import inspection facility

After being exported from the country of origin, product first arrives at the import inspection facility. This is generally the port of entry where product and transportation documentation is checked for compliance with the importing country's requirements and biosecurity standards. This may include product inspection and sample analysis before being cleared for release into the importers domestic market.

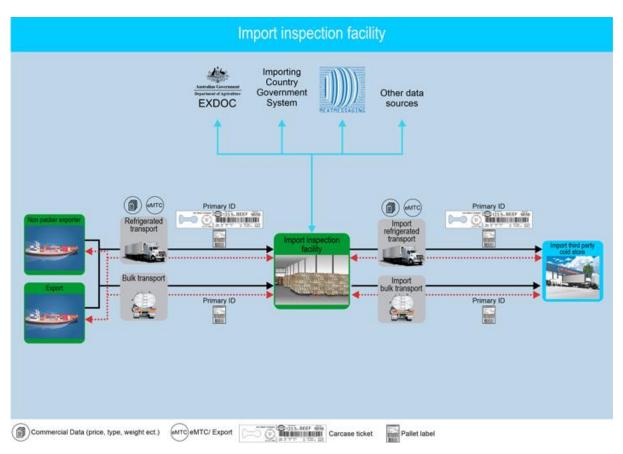


Figure 170. Inputs and outputs of the beef supply chain import inspection facility sector.

5.2.6.3.1 Physical Inputs including Critical Tracking Events (CTEs)

Container system units, which contain packaged meat product, are the physical inputs into the importers inspection facility. Critical Tracking Event related documentation such as the Bill of lading/Air Waybill, as well as Export Health Certificate and Certificate of Analysis, must accompany the movement of product to an importing country. In addition, the importer may require an import permit and Food Control Certificate for edible product or other Import clearance documentation for non-prescribed goods.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with inputs to the import inspection facility system include the receival of:

- * Container System Unit (meat and meat products)
- * Container System Unit (render and hide product).

Event	Description of the inputs	Critical Tracking Event (CTE) related documents	More
related to		(including electronic)	details
the inputs			
Container	A container designed for	Bill of lading/Air Waybill, Delivery Docket/Manifest,	
System	use as a unit of cargo	Export Health Certificate, Export Permit, Meat Messaging	
Unit (meat	handling equipment in	Consignment Report, Meat Transfer Certificate (MTC),	
and meat	the transport of goods by	Official seal, Receipt of purchase/Tax Invoice, Certificate	
products)	aircraft or ship.	of Analysis (COA)	
Container	A container designed for	Animal By Product Transfer Certificate (BPTC), Bill of	
System	use as a unit of cargo	lading/Air Waybill, Delivery Docket/Manifest, Export	
Unit	handling equipment in	clearance documentation, Export Permit, Meat Messaging	
(render and	the transport of goods by	Consignment Report, Certificate of Analysis (COA),	
hide	aircraft or ship.	Receipt of purchase/Tax Invoice	
product)			

Table 149. Physical inputs and associated Critical Tracking Event related documents for a beef import inspection facility system.

5.2.6.3.2 Information Inputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). Information inputs into the import inspection facility are those KDEs which can be drawn from CTE documentation. These may include document numbers for documents such as the Bill of lading/Air Waybill, Meat Transfer Certificate and Certificate of Analysis and Import clearance documentation as well as other product specific information.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Analysis Date	This is the date on which a product sample was analysed.	Yes	Certificate of Analysis (COA)	
Bill of lading/Air Waybill document number	A unique document number issued for traceability purposes.	Yes	Bill of lading/Air Waybill, Certificate of Analysis (COA)	
Certificate of Analysis number	A unique certificate number issued for traceability purposes.	Yes	Certificate of Analysis (COA)	
COA test lot identifier	This is a unique identifier allocated to all cartons, pallets, and shipping containers for which an analysis sample represents.	Yes	Certificate of Analysis (COA)	
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Bill of lading/Air Waybill, Certificate of Analysis (COA), Receipt of purchase/Tax Invoice	
Consignment Serial Shipping Container Code (SSCC)	Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., shipment/message that is assigned by the establishment constructing the unit. The SSCC	Yes	Animal By Product Transfer Certificate (BPTC), Bill of lading/Air Waybill, Export clearance documentation, Meat Messaging	For more information visit the GS1 website.

Table 150. Information inputs, Key Data Elements and Critical Tracking Event related documentation for a beef import inspection facility system.

	remains the same for the life of		Consignment Report, Meat	
	the logistic unit.		Transfer Certificate (MTC)	
Contract number	This is a unique number allocated to the contract by the seller.	Yes	Delivery Docket/Manifest	
Count of Pallets	This is the number of pallets in the logistic unit e.g., container system unit.	Yes	Meat Messaging Consignment Report	
Count of Trade Items	Usually encoded in the GS1 barcode, this is the number of trade items e.g., cartons in the logistic unit.	Yes	Bill of lading/Air Waybill, Delivery Docket/Manifest, Meat Messaging Consignment Report	For more information visit the GS1 website.
Date	This is the date of signing or of which a record entry or transaction was made.	Yes	Animal By Product Transfer Certificate (BPTC), Bill of lading/Air Waybill, Certificate of Analysis (COA), Delivery Docket/Manifest, Export clearance documentation, Meat Messaging Consignment Report, Meat Transfer Certificate (MTC), Receipt of purchase/Tax Invoice	
Delivery Docket/Manifest number	This is a unique number allocated to the docket for identification purposes.	Yes	Delivery Docket/Manifest	
Export Health Certificate Number	A unique number allocated to the health certificate issued for the export consignment for traceability purposes.	Yes	Export Health Certificate, Meat Messaging Consignment Report	For more information visit the Department of Agriculture, Water and the Environment website.
Export Permit Number	A unique permit number is allocated for the export consignment following submission of a correct and validated Request For Permit (RFP) which is then approved by the Secretary.	Yes	Export Permit	For more information visit the Department of Agriculture, Water, and the Environment website.
From Establishment number	A number issued by Federal and State Authorities to identify the originating site from which meat or meat products were distributed to domestic or export markets. For transfer certificates, the Establishment numbers for both the dispatching and receiving establishments are recorded.	Yes	Animal By Product Transfer Certificate (BPTC), Certificate of Analysis (COA), Delivery Docket/Manifest, Export clearance documentation, Export Health Certificate, Meat Messaging Consignment Report, Meat Transfer Certificate (MTC)	
Global Trade Item Number (GTIN)	Encoded in the GS1 barcode, the GTIN is a globally unique 14-digit number used to identify trade items, products, or services.	Yes	Meat Messaging Consignment Report	For more information visit the GS1 website.

	1	1		
Movement date	The date on which livestock or	Yes	Animal By Product Transfer	
	other products (e.g., feed or		Certificate (BPTC), Bill of	
	meat products) were transported		lading/Air Waybill,	
	between PICs/establishments.		Certificate of Analysis (COA),	
			Delivery Docket/Manifest,	
			Export clearance	
			documentation, Export	
			· · ·	
			Health Certificate, Meat	
			Transfer Certificate (MTC)	_
MSA Licence	Any establishment consigning,	Yes	Receipt of purchase/Tax	For more information on
Number	supplying, or identifying MSA		Invoice	MSA visit the
	Certified Product must be			MLA website.
	registered and have a unique			
	MSA Licence Number.			
Net Weight	Usually encoded in the GS1	Yes	Bill of lading/Air Waybill,	For more
(Kilograms)	barcode, the Net Weight is a	105	Export Health Certificate,	information
(Kilografiis)	variable measure of the trade		•	visit the GS1
			Meat Messaging	website.
	item e.g., carton, pallet or		Consignment Report	
	shipment recorded in kilograms.			
Order date	This is the date on which the	Yes	Delivery Docket/Manifest	
	purchase order or contract was			
	raised by the buyer.			
Packaging Date	Encoded in the GS1 barcode, the	Yes	Certificate of Analysis (COA)	For more
	Packaging Date is the date on			information
	which the item was packaged			visit the GS1 website.
	and is recorded in the format			website.
	year, month, day (YYMMDD).			
Packaging Date	This includes the oldest and	Yes	Export clearance	
		163	documentation	
Range	newest packaging dates for the		documentation	
	logistic unit.			Formara
Pallet Serial Shipping	Encoded in the GS1 barcode, this	Yes	Animal By Product Transfer	For more information
Container Code	is a unique number which		Certificate (BPTC), Export	visit the GS1
(SSCC)	identifies the individual logistic		clearance documentation,	website.
	unit i.e., pallet that is assigned by		Meat Messaging	
	the establishment constructing		Consignment Report, Meat	
	the unit. The SSCC remains the		Transfer Certificate (MTC)	
	same for the life of the logistic			
	unit.			
Production Date	Encoded in the GS1 barcode, this	Yes	Animal By Product Transfer	For more
(YYMMDD)	is the 'kill' or slaughter' date of		Certificate (BPTC), Certificate	information
	5			visit the GS1
	the product and is recorded in		of Analysis (COA), Meat	website.
	the format year, month, day		Transfer Certificate (MTC)	
	(YYMMDD).			
Recipient Australian	This is an 11-digit registration	Yes	Receipt of purchase/Tax	For more information
Business Number	number, issued by the Australian		Invoice	visit the ATO
(ABN)	Tax Office, used to identify			website.
	businesses.			
Seal Serial Number	This is a unique serial number	Yes	Animal By Product Transfer	For more
	printed on any tamper-evident		Certificate (BPTC), Bill of	information
	seal issued by the Department.		lading/Air Waybill, Export	visit the GS1 website.
			clearance documentation,	
		1	-	
			Most Transfor Cortificate	
			Meat Transfer Certificate (MTC), Official seal	

Seller/Supplier	This is an 11-digit registration	Yes	Receipt of purchase/Tax	For more
Australian Business	number, issued by the Australian		Invoice	information visit the ATO
Number (ABN)	Tax Office, used to identify			website.
	businesses.			
Shipping Mark	Also known as a port mark, this is	Yes	Bill of lading/Air Waybill,	
	a code comprising of three		Certificate of Analysis (COA),	
	letters representing the foreign		Delivery Docket/Manifest,	
	establishment number and the		Export Health Certificate,	
	last nine digits of the		Meat Messaging	
	consignment SSCC.		Consignment Report	
To Establishment	A number issued by Federal and	Yes	Animal By Product Transfer	
number	State Authorities to identify the		Certificate (BPTC), Export	
	originating site from which meat		clearance documentation,	
	or meat products were		Meat Transfer Certificate	
	distributed to domestic or export		(MTC)	
	markets. For transfer certificates,			
	the Establishment numbers for			
	both the dispatching and			
	receiving establishments are			
	recorded.			
Trade description	This is a collective set of words	Yes	Animal By Product Transfer	
	that says what the product is and	103	Certificate (BPTC), Delivery	
	may include information such as		Docket/Manifest, Export	
	species, net weight of product,		clearance documentation,	
	name and address of		Export Health Certificate,	
	establishments, category ciphers,		Meat Messaging	
			Consignment Report, Meat	
	market endorsements, MSA			
Transfer Certificate	eating quality etc.	Yes	Transfer Certificate (MTC)	For more
number	A unique certificate number	res	Animal By Product Transfer	information
number	issued for traceability purposes.		Certificate (BPTC), Meat	visit the
			Messaging Consignment	Department of Agriculture,
			Report, Meat Transfer	Water and the
			Certificate (MTC)	Environment
				website.
Transport	The registration number of the	Yes	Animal By Product Transfer	
registration number	vehicle in which the animals or		Certificate (BPTC), Bill of	
	product were transported. For		lading/Air Waybill, Delivery	
	shipments of product this will be		Docket/Manifest, Export	
	a shipping container number.		clearance documentation,	
			Export Health Certificate,	
			Meat Messaging	
			Consignment Report, Meat	
			Transfer Certificate (MTC)	

5.2.6.3.3 Physical Outputs including Critical Tracking Events (CTEs)

Container system units, which contain packaged meat product, are the physical outputs of the importers inspection facility. Critical Tracking Event related documentation such as the Bill of lading/Air Waybill, as well as Export Health Certificate and Certificate of Analysis, must accompany the movement of product to an importing country. In addition, the importer may require an import permit and Food Control Certificate for edible product or other Import clearance documentation for non-prescribed goods.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with the outputs of the import inspection facility system include the movement of:

- * Container System Unit (meat and meat products)
- * Container System Unit (render and hide product)

off the property, premises, or supply chain sector.

Event related to	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
the inputs			
Container	A container designed	Bill of lading/Air Waybill, Certificate of Analysis (COA), Delivery	
System	for use as a unit of	Docket/Manifest, Export Health Certificate, Export Permit,	
Unit (meat	cargo handling	Food Control Certificate, Import Permit, Imported Food	
and meat	equipment in the	Inspection Advice, Meat Messaging Consignment Report,	
products)	transport of goods by	Meat Transfer Certificate (MTC), Official seal, Receipt of	
	aircraft or ship.	purchase/Tax Invoice	
Container	A container designed	Animal By Product Transfer Certificate (BPTC), Bill of lading/Air	
System	for use as a unit of	Waybill, Certificate of Analysis (COA), Delivery	
Unit	cargo handling	Docket/Manifest, Export clearance documentation, Export	
(render	equipment in the	Permit, Import clearance documentation, Import Permit, Meat	
and hide	transport of goods by	Messaging Consignment Report, Receipt of purchase/Tax	
product)	aircraft or ship.	Invoice	

Table 151. Physical outputs and associated Critical Tracking Event related documents for a beef import inspection facility system.

5.2.6.3.4 Information Outputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). Information outputs from the import inspection facility are those KDEs which can be drawn from CTE documentation. These may include document numbers for documents such as the Bill of lading/Air Waybill, Meat Transfer Certificate and Certificate of Analysis and Import clearance documentation as well as other product specific information.

Table 152. Information outputs, Key Data Elements and Critical Tracking Event related documentation for a beef import inspection facility system.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Analysis Date	This is the date on which a product sample was analysed.	Yes	Certificate of Analysis (COA), Imported Food Inspection Advice	
Bill of lading/Air Waybill document number	A unique document number issued for traceability purposes.	Yes	Bill of lading/Air Waybill, Certificate of Analysis (COA)	
Certificate of Analysis number	A unique certificate number issued for traceability purposes.	Yes	Certificate of Analysis (COA), Imported Food Inspection Advice	

COA tost lat	This is a unique identifier	Vac	Cortificate of Applysic (COA)	
COA test lot identifier	This is a unique identifier allocated to all cartons,	Yes	Certificate of Analysis (COA), Imported Food Inspection	
luentinei	pallets, and shipping		Advice	
	containers for which an		Advice	
	analysis sample represents.			
Company/product	This is an in-house code for	Yes	Bill of lading/Air Waybill,	
code	the identification of the	res		
coue	product in the unit.		Certificate of Analysis (COA), Imported Food Inspection	
			Advice, Receipt of purchase/Tax	
			Invoice	
Consignment Serial	Encoded in the GS1 barcode,	Yes	Food Control Certificate, Import	For more
Shipping Container	this is a unique number which	163	clearance documentation,	information
	identifies the individual			visit the GS1
Code (SSCC)			Imported Food Inspection	website.
	logistic unit i.e.,		Advice, Animal By Product	
	shipment/message that is		Transfer Certificate (BPTC), Bill	
	assigned by the establishment		of lading/Air Waybill, Export	
	constructing the unit. The		clearance documentation, Meat	
	SSCC remains the same for the		Messaging Consignment	
	life of the logistic unit.		Report, Meat Transfer	
Constant and an art	This is a surface as make a	N	Certificate (MTC)	
Contract number	This is a unique number	Yes	Delivery Docket/Manifest	
	allocated to the contract by the seller.			
Count of Dollate		Vaa	Nast Massacing Consignment	
Count of Pallets	This is the number of pallets in	Yes	Meat Messaging Consignment	
	the logistic unit e.g., container		Report	
Count of Trade	system unit.	Vaa	Dill of loding (Air) A(oubill	For more
	Usually encoded in the GS1	Yes	Bill of lading/Air Waybill,	information
ltems	barcode, this is the number of		Delivery Docket/Manifest, Food	visit the GS1
	trade items e.g., cartons in the		Control Certificate, Imported	website.
	logistic unit.		Food Inspection Advice, Meat	
Data	This is the data of signing or of	Vac	Messaging Consignment Report	
Date	This is the date of signing or of	Yes	Animal By Product Transfer	
	which a record entry or transaction was made.		Certificate (BPTC), Bill of	
	transaction was made.		lading/Air Waybill, Certificate of	
			Analysis (COA), Delivery	
			Docket/Manifest, Export	
			clearance documentation, Food	
			Control Certificate, Import	
			clearance documentation, Meat	
			Messaging Consignment	
			Report, Meat Transfer	
			Certificate (MTC), Receipt of	
Dolivory	This is a unique number	Yes	purchase/Tax Invoice	
Delivery Docket/Manifest	This is a unique number allocated to the docket for	162	Delivery Docket/Manifest	
number				
	identification purposes.	Vec	Export Hoalth Cartificate Maat	For more
Export Health	A unique number allocated to the health certificate issued	Yes	Export Health Certificate, Meat	information
Certificate Number			Messaging Consignment Report	visit the
	for the export consignment			Department of
	for traceability purposes.			Agriculture, Water and the
				Environment
				website.

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Export Permit Number	A unique permit number is allocated for the export consignment following submission of a correct and validated Request For Permit (RFP) which is then approved by the Secretary.	Yes	Export Permit	For more information visit the Department of Agriculture, Water and the Environment website.
Food Control	This is a number assigned to	Yes	Food Control Certificate,	For more
Certificate entry number	the entry of a shipment of goods imported by the same owner at the same time which can be described by one import entry.		Imported Food Inspection Advice	information visit the Department of Agriculture, Water and the Environment website.
From Establishment number	A number issued by Federal and State Authorities to identify the originating site from which meat or meat products were distributed to domestic or export markets. For transfer certificates, the Establishment numbers for both the dispatching and receiving establishments are recorded.	Yes	Animal By Product Transfer Certificate (BPTC), Certificate of Analysis (COA), Delivery Docket/Manifest, Export clearance documentation, Export Health Certificate, Import clearance documentation, Meat Messaging Consignment Report, Meat Transfer Certificate (MTC)	
Global Trade Item Number (GTIN)	Encoded in the GS1 barcode, the GTIN is a globally unique 14-digit number used to identify trade items, products, or services.	Yes	Meat Messaging Consignment Report	For more information visit the GS1 website.
lmport Permit Number	A unique permit number is allocated for the import consignment following submission of correct and validated documentation approved by the importing country.	Yes	Import Permit	For more information visit the Department of Agriculture, Water and the Environment website.
Imported Food Inspection Advice certificate number	A unique certificate number issued for traceability purposes.	Yes	Imported Food Inspection Advice	For more information visit the Department of Agriculture, Water and the Environment website.
Movement date	The date on which livestock or other products (e.g., feed or meat products) were transported between PICs/establishments.	Yes	Animal By Product Transfer Certificate (BPTC), Bill of lading/Air Waybill, Certificate of Analysis (COA), Delivery Docket/Manifest, Export clearance documentation, Export Health Certificate, Food Control Certificate, Import clearance documentation, Meat Transfer Certificate (MTC)	

MSA Licence Number	Any establishment consigning, supplying, or identifying MSA Certified Product must be registered and have a unique MSA Licence Number.	Yes	Receipt of purchase/Tax Invoice	Eor more information on MSA visit the MLA website.
Net Weight (Kilograms)	Usually encoded in the GS1 barcode, the Net Weight is a variable measure of the trade item e.g., carton, pallet or shipment recorded in kilograms.	Yes	Bill of lading/Air Waybill, Export Health Certificate, Meat Messaging Consignment Report	For more information visit the GS1 website.
Order date	This is the date on which the purchase order or contract was raised by the buyer.	Yes	Delivery Docket/Manifest	
Packaging Date	Encoded in the GS1 barcode, the Packaging Date is the date on which the item was packaged and is recorded in the format year, month, day (YYMMDD).	Yes	Certificate of Analysis (COA)	For more information visit the GS1 website.
Packaging Date Range	This includes the oldest and newest packaging dates for	Yes	Export clearance documentation, Import	For more information visit the GS1
	the logistic unit.		clearance documentation	website.
Pallet Serial Shipping Container Code (SSCC)	Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., pallet that is	Yes	Animal By Product Transfer Certificate (BPTC), Export clearance documentation, Import clearance	For more information visit the GS1 website.
	assigned by the establishment constructing the unit. The SSCC remains the same for the life of the logistic unit.		documentation, Meat Messaging Consignment Report, Meat Transfer Certificate (MTC)	
Production Date (YYMMDD)	Encoded in the GS1 barcode, this is the 'kill' or slaughter' date of the product and is recorded in the format year, month, day (YYMMDD).	Yes	Animal By Product Transfer Certificate (BPTC), Certificate of Analysis (COA), Meat Transfer Certificate (MTC)	For more information visit the GS1 website.
Recipient Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Receipt of purchase/Tax Invoice	For more information visit the ATO website.
Seal Serial Number	This is a unique serial number printed on any tamper- evident seal issued by the Department.	Yes	Animal By Product Transfer Certificate (BPTC), Bill of lading/Air Waybill, Export clearance documentation, Import clearance documentation, Meat Transfer Certificate (MTC), Official seal	For more information visit the GS1 website.
Seller/Supplier Australian Business Number (ABN)	This is an 11-digit registration number, issued by the Australian Tax Office, used to identify businesses.	Yes	Receipt of purchase/Tax Invoice	For more information visit the ATO website.
Shipping Mark	Also known as a port mark, this is a code comprising of	Yes	Bill of lading/Air Waybill, Certificate of Analysis (COA),	

	three letters representing the		Delivery Docket/Manifest,	
	foreign establishment number		Export Health Certificate, Meat	
	and the last nine digits of the		Messaging Consignment Report	
	consignment SSCC.			
To Establishment	A number issued by Federal	Yes	Animal By Product Transfer	
number	and State Authorities to		Certificate (BPTC), Export	
	identify the originating site		clearance documentation,	
	from which meat or meat		Import clearance	
	products were distributed to		documentation, Meat Transfer	
	domestic or export markets.		Certificate (MTC)	
	For transfer certificates, the			
	Establishment numbers for			
	both the dispatching and			
	receiving establishments are			
	recorded.			
Trade description	This is a collective set of	Yes	Animal By Product Transfer	
	words that says what the	105	Certificate (BPTC), Delivery	
	product is and may include		Docket/Manifest, Export	
	information such as species,		clearance documentation,	
	net weight of product, name		Export Health Certificate, Food	
	and address of		Control Certificate, Import	
	establishments, category		clearance documentation, Meat	
	ciphers, market		Messaging Consignment	
	-			
	endorsements, MSA eating		Report, Meat Transfer	
Transfor Contificato	quality etc.	Vaa	Certificate (MTC)	For more
Transfer Certificate	A unique certificate number	Yes	Animal By Product Transfer	information
number	issued for traceability		Certificate (BPTC), Meat	visit the
	purposes.		Messaging Consignment	Department of
			Report, Meat Transfer	Agriculture, Water and the
			Certificate (MTC)	Environment
				website.
Transport	The registration number of	Yes	Animal By Product Transfer	
registration number	the vehicle in which the		Certificate (BPTC), Bill of	
	animals or product were		lading/Air Waybill, Delivery	
	transported. For shipments of		Docket/Manifest, Export	
	product this will be a shipping		clearance documentation,	
	container number.		Export Health Certificate, Food	
			Control Certificate, Import	
			clearance documentation, Meat	
			Messaging Consignment	
			Report, Meat Transfer	
			Certificate (MTC)	

- 5.2.6.3.5 Regulatory and Industry Programs
- * Export Documentation System (EXDOC)
- * Importing Country Government System
- * Meat Messaging
- * Other data sources

5.2.6.3.6 Supply Chain Node Traceability

The traceability of product undergoing export/importation back to the live animal and property of origin is dependent on the form (carcase, carton, pallet or render store bag subunits) in which the product is being exported/imported. All container system units undergoing export must be accompanied by a Meat Messaging Consignment Report and a Meat Transfer Certificate (MTC) or Animal By Product Transfer Certificate (BPTC). The Consignment Report is issued to the buyer of product and lists all the logistic unit and subunit unique serialised identifiers contained within the Container System Unit including the Consignment Serial Shipping Container Code (SSCC), Pallet Serial Shipping Container Code, and scanned and verified carton label serial identifiers. Additionally, the Transfer Certificate details the serialised logistic unit identifiers such as the Serial Shipping Container Code (SSCC). These documents allow traceability of the unit and its subunits back to either the live animal and property of origin (for carcases) or processor production run (for cartons and palletised meat and meat products).

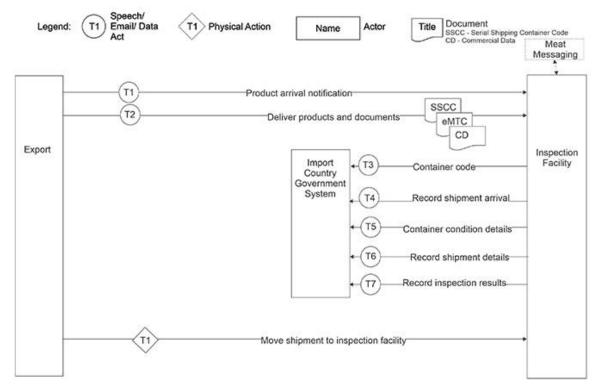
For traceability information pertaining to render and hide products please refer to 'Supply Chain Node Traceability' under each of these nodes. For carton and carcase products please refer to Boning Room and Carcase Chiller 'Supply Chain Node Traceability' respectively.

5.2.6.3.7 Data flow diagrams

Table 153. Data flow diagrams for the inputs and outputs of a beef import inspection facility system.

Direction	Description
Input	Export to Import Inspection Facility
Output	Import Inspection Facility to Third Party Cold Store

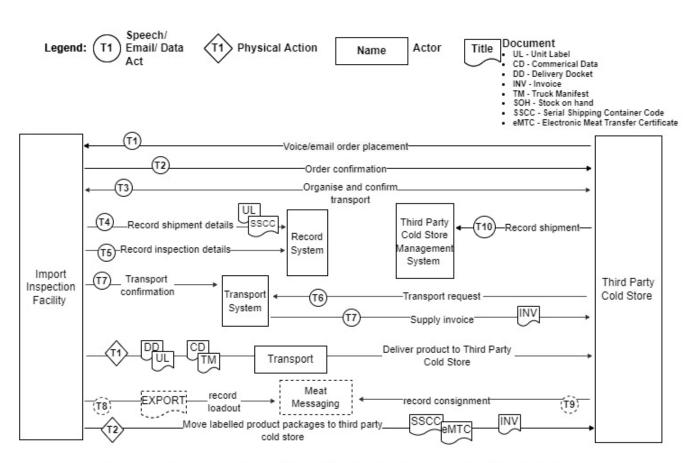




Export to Inspection Facility

Figure 171. Data or information flows from the export to import inspection facility systems in the beef supply chain.

5.2.6.3.7.2 Import Inspection Facility to Third Party Cold Store



Import Inspection Facility to Third Party Cold Store

Figure 172. Data or information flows from the import inspection facility to third party cold store systems in the beef supply chain.

5.2.6.4 Import livestock processing

See **Exporting Country - Processing** Section for more information.

5.2.6.5 Import value-added

Value-adding includes any process or service in the supply chain that adds to or enhances the value of products to consumers and typically the profitability of raw meat products. This may be simply providing a new variety of cuts, changing the presentation of products, or adding additional ingredients to create new products or enhance the profitability of raw products. Value-adding may also include the processing of offal and raw products for sale. Typically, value adders receive carcase or cartoned product from processor cold stores, or third-party cold store facilities via refrigerated transport.

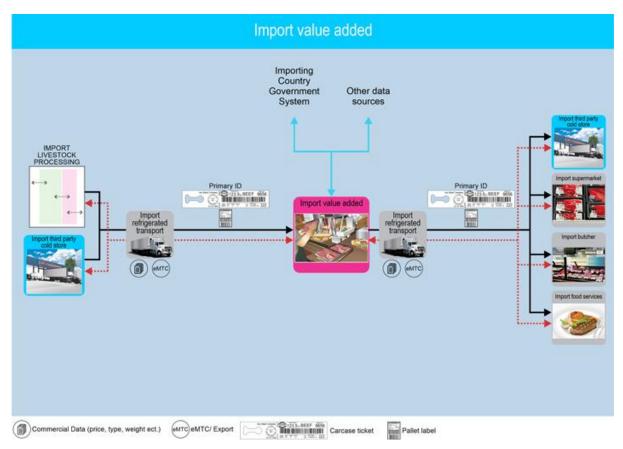


Figure 173. Inputs and outputs of the beef supply chain import value-added sector.

5.2.6.5.1 Physical Inputs including Critical Tracking Events (CTEs)

Inputs into the value-added system include raw beef products such as carcases, carton, and palletised items. Where additional ingredients are added to the product such as those used for marinade, these are also inputs to the system. Documentation associated with the movement of product into the value-added system may include Delivery Dockets, import specific meat/meat product movement forms, Import Receipt of purchase/Tax Invoice etc.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with inputs to the import value added system include the receival of:

- * Carcase
- * Carton
- * Pallet
- * Product additives.

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Carcase	The body of a slaughtered animal after bleeding. Becomes a dressed carcase when hide, head, feet and offal are removed.	Carcase Ticket, Delivery Docket/Manifest, Import specific meat/meat product movement forms, Value Added production management system, Import Receipt of purchase/Tax Invoice	
Carton	This is a case, crate, or barrel of product.	Carton label, Delivery Docket/Manifest, Import specific meat/meat product movement forms, Value Added production management system, Import Receipt of purchase/Tax Invoice	
Pallet	A logistic unit which includes a number of cartons or goods items packed together for transport or storage purposes.	Delivery Docket/Manifest, Import specific meat/meat product movement forms, Value Added production management system, Import Receipt of purchase/Tax Invoice, SSCC/Pallet label	
Product additives	These are ingredients or additives used to enhance the value of raw beef product.	Import Receipt of purchase/Tax Invoice, Value Added production management system	

Table 154. Physical inputs and associated Critical Tracking Event related documents for a beef import value-added system.

5.2.6.5.2 Information Inputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). Key Data Elements drawn from Critical Tracking Event documentation range from carcase body numbers to delivery docket numbers to application identifiers included in the GS1 barcode on the carton or pallet label. This information may be recorded in the value adder's production management system for product traceability purposes.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Batch number	This is a unique number which identifies products sharing certain production characteristics and is used for traceability purposes.	Yes	Carcase Ticket, Value Added production management system	
Body number	This is a number assigned to each carcase by the processor for identification purposes.	Yes	Carcase Ticket, Value Added production management system	
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Carton label, Import Receipt of purchase/Tax Invoice, SSCC/Pallet label, Value Added production management system	
Consignment Serial Shipping Container Code (SSCC)	Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., shipment/message that is assigned by	Yes	Import specific meat/meat product movement forms, SSCC/Pallet label,	For more information visit the GS1 website.

Table 155. Information inputs, Key Data Elements and Critical Tracking Event related documentation for a beef import value-added system.

		1		
	the establishment constructing the		Value Added	
	unit. The SSCC remains the same for		production	
	the life of the logistic unit.		management system	
Contract number	This is a unique number allocated to	Yes	Delivery	
	the contract by the seller.		Docket/Manifest,	
			Value Added	
			production	
			management system	
Count of Trade	Usually encoded in the GS1 barcode,	Yes	Delivery	For more
Items	this is the number of trade items e.g.,		Docket/Manifest,	information visit the GS1
	cartons in the logistic unit.		SSCC/Pallet label,	website.
			Value Added	
			production	
			management system	
Date	This is the date of signing or of which a	Yes	Delivery	
	record entry or transaction was made.		Docket/Manifest,	
			Import Receipt of	
			purchase/Tax Invoice,	
			Import specific	
			meat/meat product	
			movement forms,	
			Value Added	
			production	
			management system	
Delivery	This is a unique number allocated to	Yes	Delivery	
Docket/Manifest	the docket for identification purposes.		Docket/Manifest,	
number			Value Added	
			production	
			management system	
From Establishment	A number issued by Federal and State	Yes	Carcase Ticket, Carton	For more
number	Authorities to identify the originating		label, Delivery	information
	site from which meat or meat products		Docket/Manifest,	visit the Department of
	were distributed to domestic or export		SSCC/Pallet label,	Agriculture,
	markets. For transfer certificates, the		Value Added	Water and the
	Establishment numbers for both the		production	Environment website.
	dispatching and receiving		management system	website.
	establishments are recorded.			
From property	The identification of the property (may	Yes	Import specific	
identifier	be a PIC) from/to where the livestock		meat/meat product	
	or product were consigned.		movement forms,	
			Value Added	
			production	
			management system	
Global Trade Item	Encoded in the GS1 barcode, the GTIN	Yes	Carcase Ticket, Carton	For more
Number (GTIN)	is a globally unique 14-digit number		label, SSCC/Pallet label,	information
x - · · /	used to identify trade items, products,		Value Added	visit the GS1 website.
	or services.		production	woodite.
			management system	
GTIN of Contained	Encoded in the GS1 barcode, the GTIN	Yes	SSCC/Pallet label,	For more
Trade Items	of the contained trade items is a		Value Added	information
	globally unique 14-digit number used		production	visit the GS1
	to identify trade items, products, or		management system	website.
	services in the logistic unit.		management system	
	שבו אונכא ווו נוופ וטצוגונ עווונ.	L		

Lot number	A lot is a number assigned by the	Yes	Carcase Ticket, Value	
	processor to each group of cattle		Added production	
	consigned to slaughter and is usually		management system	
	vendor specific.			
Meat/meat product	A unique certificate number issued for	Yes	Import specific	
movement form	traceability purposes.		meat/meat product	
number			movement forms,	
			Value Added	
			production	
			management system	
Movement date	The date on which livestock or other	Yes	Delivery	
	products (e.g., feed or meat products)		Docket/Manifest,	
	were transported between		Import specific	
	PICs/establishments.		meat/meat product	
			movement forms,	
			Value Added	
			production	
			management system	
Net Weight	Usually encoded in the GS1 barcode,	Yes	Carcase Ticket, Carton	For more
(Kilograms)	the Net Weight is a variable measure		label, SSCC/Pallet label,	information visit the GS1
	of the trade item e.g., carton, pallet or		Value Added	website.
	shipment recorded in kilograms.		production	<u></u>
			' management system	
Official mark	Any stamp, seal, label, or mark that is	Yes	Carcase Ticket, Carton	For more
	declared by the regulations to be an		label, SSCC/Pallet label,	information
	official mark. An official mark signifies		Value Added	visit the Department of
	that the product has been inspected by		production	Agriculture,
	and approved as safe for human		management system	Water and the
	consumption by an Authorised Officer.			Environment website.
Order date	This is the date on which the purchase	Yes	Delivery	mobolito.
	order or contract was raised by the		, Docket/Manifest,	
	buyer.		Value Added	
	,		production	
			management system	
Packaging Date	Encoded in the GS1 barcode, the	Yes	Carton label,	For more
	Packaging Date is the date on which		SSCC/Pallet label,	information
				visit the GS1
	the item was packaged and is recorded		Value Added	website
	the item was packaged and is recorded in the format year, month, day		production	website.
	the item was packaged and is recorded in the format year, month, day (YYMMDD).			website.
Packaging Date	in the format year, month, day	Yes	production	website.
Packaging Date Range	in the format year, month, day (YYMMDD).	Yes	production management system	<u>website.</u>
	in the format year, month, day (YYMMDD). This includes the oldest and newest	Yes	production management system SSCC/Pallet label,	website.
	in the format year, month, day (YYMMDD). This includes the oldest and newest	Yes	production management system SSCC/Pallet label, Value Added	website.
	in the format year, month, day (YYMMDD). This includes the oldest and newest	Yes Yes	production management system SSCC/Pallet label, Value Added production	For more
Range	in the format year, month, day (YYMMDD). This includes the oldest and newest packaging dates for the logistic unit.		production management system SSCC/Pallet label, Value Added production management system	For more information
Range Pallet Serial Shipping Container Code	in the format year, month, day (YYMMDD). This includes the oldest and newest packaging dates for the logistic unit. Encoded in the GS1 barcode, this is a		production management system SSCC/Pallet label, Value Added production management system Import specific	For more information visit the GS1
Range Pallet Serial Shipping	in the format year, month, day (YYMMDD). This includes the oldest and newest packaging dates for the logistic unit. Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., pallet that is		production management system SSCC/Pallet label, Value Added production management system Import specific meat/meat product movement forms,	For more information
Range Pallet Serial Shipping Container Code	in the format year, month, day (YYMMDD). This includes the oldest and newest packaging dates for the logistic unit. Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., pallet that is assigned by the establishment		production management system SSCC/Pallet label, Value Added production management system Import specific meat/meat product	For more information visit the GS1
Range Pallet Serial Shipping Container Code	in the format year, month, day (YYMMDD). This includes the oldest and newest packaging dates for the logistic unit. Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., pallet that is assigned by the establishment constructing the unit. The SSCC		production management system SSCC/Pallet label, Value Added production management system Import specific meat/meat product movement forms, SSCC/Pallet label, Value Added	For more information visit the GS1
Range Pallet Serial Shipping Container Code	in the format year, month, day (YYMMDD). This includes the oldest and newest packaging dates for the logistic unit. Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., pallet that is assigned by the establishment constructing the unit. The SSCC remains the same for the life of the		production management system SSCC/Pallet label, Value Added production management system Import specific meat/meat product movement forms, SSCC/Pallet label, Value Added production	For more information visit the GS1
Range Pallet Serial Shipping Container Code (SSCC)	in the format year, month, day (YYMMDD). This includes the oldest and newest packaging dates for the logistic unit. Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., pallet that is assigned by the establishment constructing the unit. The SSCC remains the same for the life of the logistic unit.	Yes	production management system SSCC/Pallet label, Value Added production management system Import specific meat/meat product movement forms, SSCC/Pallet label, Value Added production management system	For more information visit the GS1
Range Pallet Serial Shipping Container Code	in the format year, month, day (YYMMDD). This includes the oldest and newest packaging dates for the logistic unit. Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., pallet that is assigned by the establishment constructing the unit. The SSCC remains the same for the life of the		production management system SSCC/Pallet label, Value Added production management system Import specific meat/meat product movement forms, SSCC/Pallet label, Value Added production	For more information visit the GS1 website.

	and is recorded in the format year, month, day (YYMMDD).		forms, Value Added production	
			management system	
Recipient Business Number	This is a unique registration number, used to identify businesses.	Yes	Import Receipt of purchase/Tax Invoice, Value Added production management system	
Seller/Supplier	This is a unique registration number,	Yes	Import Receipt of	
Business Number	used to identify businesses.		purchase/Tax Invoice, Value Added production management system	
Serial Number	Encoded in the GS1 barcode, this is a code, numeric or alphanumeric, assigned to an individual instance of an item for its lifetime.	Yes	Carcase Ticket, Carton label, Value Added production management system	For more information visit the GS1 website.
Shipping Mark	Also known as a port mark, this is a code comprising of three letters representing the foreign establishment number and the last nine digits of the consignment SSCC.	Yes	Delivery Docket/Manifest, SSCC/Pallet label, Value Added production management system	
To property identifier	The identification of the property (may be a PIC) from/to where the livestock or product were consigned.	Yes	Import specific meat/meat product movement forms, Value Added production management system	
Trade description	This is a collective set of words that says what the product is and may include information such as species, net weight of product, name and address of establishments, category ciphers, market endorsements, MSA eating quality etc.	Yes	Carcase Ticket, Carton label, Delivery Docket/Manifest, SSCC/Pallet label, Value Added production management system	
Transport registration number	The registration number of the vehicle in which the animals or product were transported. For shipments of product this will be a shipping container number.	Yes	Delivery Docket/Manifest, Import specific meat/meat product movement forms, Value Added production management system	

5.2.6.5.3 Physical Outputs including Critical Tracking Events (CTEs)

The outputs of the value-added system included altered meat product, with increased value, that is packed into cartons or pallets for distribution. Critical Tracking Event related documentation required for the movement of product may include Delivery Dockets, Import specific meat/meat product movement forms, Import Receipt of purchase/Tax Invoice etc.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with the outputs of the import value added system include the movement of:

* Carton

* Pallet

off the property, premises, or supply chain sector.

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Carton	This is a case, crate, or barrel of product.	Carton label Delivery Docket/Manifest, Import specific meat/meat product movement forms, Value Added production management system, Import Receipt of purchase/Tax Invoice	
Pallet	A logistic unit which includes a number of cartons or goods items packed together for transport or storage purposes.	Delivery Docket/Manifest, Import specific meat/meat product movement forms, Value Added production management system, Import Receipt of purchase/Tax Invoice, SSCC/Pallet label	

Table 156. Physical outputs and associated Critical Tracking Event related documents for a beef import value-added system.

5.2.6.5.4 Information Outputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). Key Data Elements from value added Critical Tracking Event related documentation may be stored in the value adder's production management system. Such information may include, but not be limited to, GS1 barcode application identifiers, movement dates, product net weight and import specific meat/meat product movement certificate numbers.

Table 157. Information outputs, Key Data Elements and Critical Tracking Event related documentation for a beef import value-added system.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Carton label, Import Receipt of purchase/Tax Invoice, SSCC/Pallet label, Value Added production management system	
Consignment Serial Shipping Container Code (SSCC)	Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., shipment/message that is assigned by the establishment constructing the unit.	Yes	Import specific meat/meat product movement forms, SSCC/Pallet label, Value Added	For more information visit the GS1 website.

	The SSCC remains the same for the life		production	
	of the logistic unit.			
Contract number		Vac	management system	
Contract number	This is a unique number allocated to the	Yes	Delivery	
	contract by the seller.		Docket/Manifest,	
			Value Added	
			production	
			management system	_
Count of Trade	Usually encoded in the GS1 barcode,	Yes	Delivery	For more information
Items	this is the number of trade items e.g.,		Docket/Manifest,	visit the GS1
	cartons in the logistic unit.		SSCC/Pallet label,	website.
			Value Added	
			production	
			management system	
Date	This is the date of signing or of which a	Yes	Delivery	
	record entry or transaction was made.		Docket/Manifest,	
	,		Import Receipt of	
			purchase/Tax Invoice,	
			Import specific	
			meat/meat product	
			movement forms,	
			Value Added	
			production	
			•	
Deliver	This is a unique number allocated to the	Vac	management system	
Delivery	This is a unique number allocated to the	Yes	Delivery	
Docket/Manifest	docket for identification purposes.		Docket/Manifest,	
number			Value Added	
			production	
			management system	
From Establishment	A number issued by Federal and State	Yes	Carton label, Delivery	
number	Authorities to identify the originating		Docket/Manifest,	
	site from which meat or meat products		SSCC/Pallet label,	
	were distributed to domestic or export		Value Added	
	markets. For transfer certificates, the		production	
	Establishment numbers for both the		management system	
	dispatching and receiving			
	establishments are recorded.			
From property	The identification of the property (may	Yes	Import specific	
identifier	be a PIC) from/to where the livestock or		meat/meat product	
	product were consigned.		movement forms,	
			Value Added	
			production	
			management system	
Global Trade Item	Encoded in the GS1 barcode, the GTIN	Yes	Carton label,	For more
Number (GTIN)	is a globally unique 14-digit number	103	SSCC/Pallet label,	information
	used to identify trade items, products,		Value Added	visit the GS1
				website.
	or services.		production	
		Ver	management system	For more
GTIN of Contained	Encoded in the GS1 barcode, the GTIN	Yes	SSCC/Pallet label,	For more information
Trade Items	of the contained trade items is a		Value Added	visit the GS1
	globally unique 14-digit number used to		production	website.
	identify trade items, products, or		management system	
	services in the logistic unit.			

Meat/meat product	A unique certificate number issued for	Yes	Import specific	
movement form number	traceability purposes.		meat/meat product movement forms,	
			Value Added	
			production	
			management system	
Movement date	The date on which livestock or other	Yes	Delivery	
	products (e.g., feed or meat products)		Docket/Manifest,	
	were transported between		Import specific	
	PICs/establishments.		meat/meat product	
			movement forms,	
			Value Added	
			production	
			management system	F - m - m
Net Weight	Usually encoded in the GS1 barcode,	Yes	Carton label,	For more information
(Kilograms)	the Net Weight is a variable measure of		SSCC/Pallet label,	visit the GS1
	the trade item e.g., carton, pallet or		Value Added	website.
	shipment recorded in kilograms.		production	
Official as a sh		N	management system	For more
Official mark	Any stamp, seal, label, or mark that is	Yes	Carton label,	information
	declared by the regulations to be an		SSCC/Pallet label, Value Added	visit the
	official mark. An official mark signifies that the product has been inspected by		production	Australian Government
	and approved as safe for human		management system	Federal
	consumption by an Authorised Officer.		management system	Register of
Ondendete	1 1	N	Delivery	Legislation.
Order date	This is the date on which the purchase	Yes	Delivery Desket/Manifest	
	order or contract was raised by the		Docket/Manifest, Value Added	
	buyer.		production	
			management system	
Packaging Date	Encoded in the GS1 barcode, the	Yes	Carton label,	For more
0.0	Packaging Date is the date on which the		SSCC/Pallet label,	information
	item was packaged and is recorded in		Value Added	visit the GS1 website.
	the format year, month, day		production	<u>mobolito.</u>
	(YYMMDD).		management system	
Packaging Date	This includes the oldest and newest	Yes	SSCC/Pallet label,	For more
Range	packaging dates for the logistic unit.		Value Added	information visit the GS1
			production	website.
			management system	
Pallet Serial Shipping	Encoded in the GS1 barcode, this is a	Yes	Import specific	For more
Container Code	unique number which identifies the		meat/meat product	information visit the GS1
(SSCC)	individual logistic unit i.e., pallet that is		movement forms,	website.
	assigned by the establishment		SSCC/Pallet label,	
	constructing the unit. The SSCC remains		Value Added	
	the same for the life of the logistic unit.		production	
Due due tiere De La		N a c	management system	For more
Production Date	Encoded in the GS1 barcode, this is the	Yes	Import specific	For more information
(YYMMDD)	'kill' or slaughter' date of the product		meat/meat product	visit the GS1
	and is recorded in the format year,		movement forms,	website.
	month, day (YYMMDD).		Value Added	
			production	
			management system	

Recipient Business Number	This is a unique registration number, used to identify businesses.	Yes	Import Receipt of purchase/Tax Invoice,	
			Value Added production	
			management system	
Seller/Supplier Business Number	This is a unique registration number, used to identify businesses.	Yes	Import Receipt of purchase/Tax Invoice, Value Added production	
Serial Number	Encoded in the GS1 barcode, this is a code, numeric or alphanumeric, assigned to an individual instance of an item for its lifetime.	Yes	management system Carton label, Value Added production management system	For more information visit the GS1 website.
Shipping Mark	Also known as a port mark, this is a code comprising of three letters representing the foreign establishment number and the last nine digits of the consignment SSCC.	Yes	Delivery Docket/Manifest, SSCC/Pallet label, Value Added production management system	
To property identifier	The identification of the property (may be a PIC) from/to where the livestock or product were consigned.	Yes	Import specific meat/meat product movement forms, Value Added production management system	
Trade description	This is a collective set of words that says what the product is and may include information such as species, net weight of product, name and address of establishments, category ciphers, market endorsements, MSA eating quality etc.	Yes	Carton label, Delivery Docket/Manifest, SSCC/Pallet label, Value Added production management system	
Transport registration number	The registration number of the vehicle in which the animals or product were transported. For shipments of product this will be a shipping container number.	Yes	Delivery Docket/Manifest, Import specific meat/meat product movement forms, Value Added production management system	

- 5.2.6.5.5 Regulatory and Industry Programs
- * Importing Country Government System
- * Other data sources

5.2.6.5.6 Supply Chain Node Traceability

For Value Added operations the ability to trace product forward and track product backwards is defined by food safety regulations. In practice, this means that any prepared meat retail ready or food service products are managed as a batch (with unique serialised carton labels or retail ready product labels) with the inputs to the

batch being all the carcase or carton identification units (carcase tickets/carton labels) that went into the batch. Should a recall occur related to any of the input material the whole value-added batch(s) would be recalled.

Tracing a single meat retail ready or food service product (e.g., a portion prepared steak) back to a single animal or source property is operationally impractical. The example below shows the complexity of such a trace back.

Retail ready product traceability example:

1. The volume of retail ready or food service product made in a batch would likely be in the order of 1 000 kg (50 x 20 kg primal cut cartons) which equates to 100 x 10 kg of finished retail ready/food service cartons or approximately 5 000 x 200 g portioned steaks. This is managed as a production batch and as such, any one steak in any carton may have come from any of the 50 x 20 kg primal cut cartons.

The cartons from which this retail ready product (50 x 20 kg cartons) was produced may have been comprised of 1 000 kg of cube roll primal cut cartons. These cartons might typically be sourced from 2 processing establishments and over 3 production days for each processing establishment, this is a total of 6 plant kill days.
 The average weight of the cube rolls in each carton is 3.3 kg. This means that each carton has 6 cube rolls. With each carcase having 2 cube rolls, the 50 cartons may have been produced from 150 head of cattle.

4. Each processing plant might kill 500 head per day, and these might come from an average of 20 source properties. Traceability of cartoned boning room product is limited to the carcases that have entered the boning room for the production run of cartons that are created. This means that the primal cut e.g., cube roll in any carton may have come from any of the 500 carcases for that boning run production day.

5. As the cube roll primal cut cartons came from a total of 6 plant kill day combinations, this equates to any primal cut coming from any one of a possible 3 000 head of cattle or 120 possible source properties.

In summary, for this example any individual 200 g portion cut steak may have come from any one of 3 000 head of cattle from any one of 120 source properties. It is possible in some very small scale and very high value commercial operations to manage single body boning and tracking the cuts to retail ready packaging. However, this would represent less that a fraction of a percent of the total meat industry production volume.

Direction	Description	
Input	Import Refrigerated Transport	
Input	Import Third Party Cold Store to Import Value Added	
Output	Import Value Added to Import Third Party Cold Store	
Output	Import Value Added to Import Supermarket	
Output	Import Value Added to Import Butcher	
Output	Import Value Added to Import Food Services	

5.2.6.5.7 Data flow diagrams

Table 158. Data flow diagrams for the inputs	and outputs of a beef import value added system

(T3

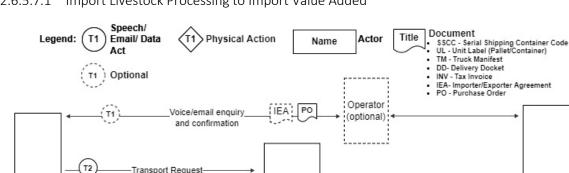
(11)

(14)

Import

Pickup

Location



5.2.6.5.7.1 Import Livestock Processing to Import Value Added

Transport confirmation

Tax Invoice

Supply of beef product

and documentation

SSCC

INV

TM

UL

Import Refrigerated Transport

Refrigerated

Transport

Figure 174. Data or information flows from the import refrigerated transport systems in the beef supply chain.

5.2.6.5.7.2 Import Third Party Cold Store to Import Value Added

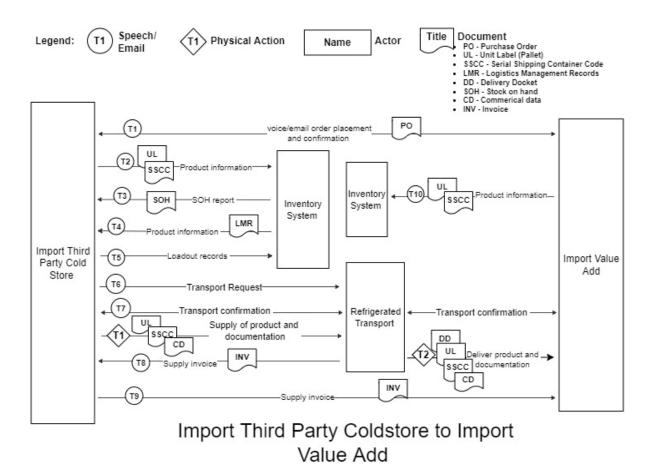


Figure 175. Data or information flows from import third party cold store to import value add systems in the beef supply chain.

Import Value

Add

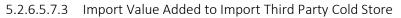
SSCC

DD

UL

Delivery of beef product

and documentation



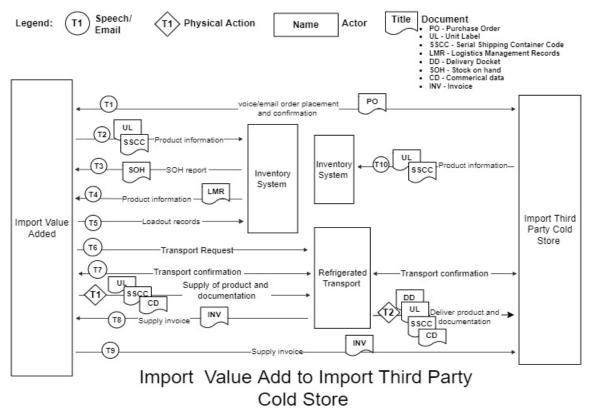
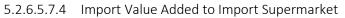
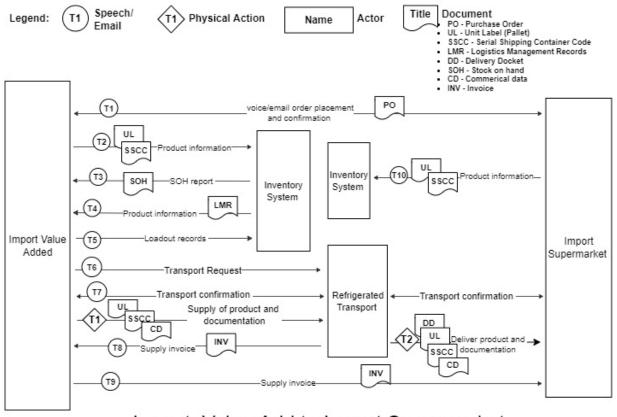


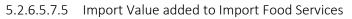
Figure 176. Data or information flows from import value add to import third party cold store systems in the beef supply chain.





Import Value Add to Import Supermarket

Figure 177. Data or information flows from the import value add to import supermarket the beef supply chain.



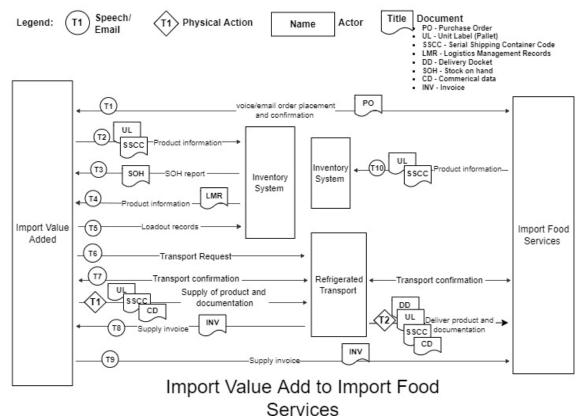


Figure 178. Data or information flows from the import value add to import food services systems in the beef supply chain.

5.2.6.6 Import third party cold store

Storing chilled carcases or carcase products (e.g., cartons) typically provides a stock buffer between production and dispatch of product intended for domestic or export markets. A third-party cold storage system is an establishment, separate from a processing establishment, which performs activities the same as that for a cold storage facility integrated into a processing plant. However, product from multiple suppliers may be stored and/combined for dispatch. A cold storage facility involves refrigerated chambers that can chill or freeze any perishable product for a period of time before dispatch. During this process, the ageing of meat also occurs, progressively increasing tenderness and flavour. Storage rooms must take into account the storage requirements for different products as well as rules for loading, maintenance and hygiene of storage equipment.

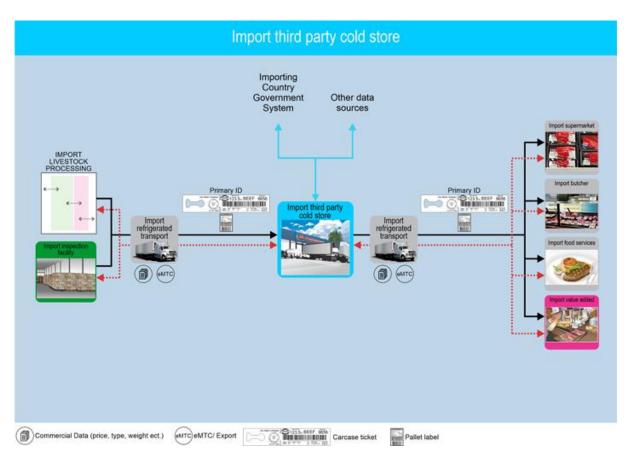


Figure 179. Inputs and outputs of the beef supply chain import third party cold store sector.

5.2.6.6.1 Physical Inputs including Critical Tracking Events (CTEs)

Cold stores generally offer their clients a range of services involving stock rotation, logistics, maintenance, and systems of identification. Product moved into cold stores ranges from carcases to pallets of product. These are accompanied by documentation such as Import specific movement documents and Delivery Dockets.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with inputs to the import third party cold store system include the receival of:

- * Carcase
- * Carton

* Pallet

* Container System Unit (meat and meat products).

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Carcase	The body of a slaughtered animal after bleeding. Becomes a dressed carcase when hide, head, feet and offal are removed.	Carcase Ticket, Delivery Docket/Manifest, Import specific meat/meat product movement forms, Third Party Cold Store production management system, Import Receipt of purchase/Tax Invoice	
Carton	This is a case, crate, or barrel of product.	Carton label, Delivery Docket/Manifest, Import specific meat/meat product movement forms, Third Party Cold Store production management system, Import Receipt of purchase/Tax Invoice	
Pallet	A logistic unit which includes a number of cartons or goods items packed together for transport or storage purposes.	Delivery Docket/Manifest, Import specific meat/meat product movement forms, Third Party Cold Store production management system, Import Receipt of purchase/Tax Invoice, SSCC/Pallet label	
Container System Unit (meat and meat products)	A container designed for use as a unit of cargo handling equipment in the transport of goods by aircraft or ship.	Bill of lading/Air Waybill, Certificate of Analysis (COA), Delivery Docket/Manifest, Import Permit, Import specific meat/meat product movement forms, Imported Food Inspection Advice, Import Receipt of purchase/Tax Invoice, Third Party Cold Store production management system	

Table 159. Physical inputs and associated Critical Tracking Event related documents for a beef import third party cold store system.

5.2.6.6.2 Information Inputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). Key Data Elements found on CTE documentation accompanying the movement of product into cold stores ranges from carcase body numbers (found on the Carcase Ticket) to establishment numbers, official marks, and seal serial numbers.

Table 160. Information inputs, Key Data Elements and Critical Tracking Event related documentation for a beef import third party cold store system.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Analysis Date	This is the date on which a product sample was analysed.	Yes	Certificate of Analysis (COA), Imported Food Inspection Advice, Third Party Cold Store production management system	

Batch number	This is a unique number which identifies products sharing certain production characteristics and is used for traceability purposes.	Yes	Carcase Ticket, Third Party Cold Store production management system	
Bill of lading/Air Waybill document number	A unique document number issued for traceability purposes.	Yes	Bill of lading/Air Waybill, Certificate of Analysis (COA), Third Party Cold Store production management system	
Body number	This is a number assigned to each carcase by the processor for identification purposes.	Yes	Carcase Ticket, Third Party Cold Store production management system	
Certificate of Analysis number	A unique certificate number issued for traceability purposes.	Yes	Certificate of Analysis (COA), Imported Food Inspection Advice, Third Party Cold Store production management system	
COA test lot identifier	This is a unique identifier allocated to all cartons, pallets, and shipping containers for which an analysis sample represents.	Yes	Certificate of Analysis (COA), Imported Food Inspection Advice, Third Party Cold Store production management system	
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Bill of lading/Air Waybill, Carton label, Certificate of Analysis (COA), Import Receipt of purchase/Tax Invoice, Imported Food Inspection Advice, SSCC/Pallet label, Third Party Cold Store production management system	
Consignment Serial Shipping Container Code (SSCC)	Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., shipment/message that is assigned by the establishment constructing the unit. The SSCC remains the same for the life of the logistic unit.	Yes	Bill of lading/Air Waybill, Import specific meat/meat product movement forms, Imported Food Inspection Advice, SSCC/Pallet label, Third Party Cold Store production management system	For more information visit the GS1 website.
Contract number	This is a unique number allocated to the contract by the seller.	Yes	Delivery Docket/Manifest, Third Party Cold Store production management system	
Count of Trade Items	Usually encoded in the GS1 barcode, this is the number of trade items e.g., cartons in the logistic unit.	Yes	Bill of lading/Air Waybill, Delivery Docket/Manifest, Imported Food Inspection Advice, SSCC/Pallet label, Third Party Cold Store production management system	For more information visit the GS1 website.

Date	This is the date of signing or of which a record entry or transaction was made. This is a unique number allocated	Yes	Bill of lading/Air Waybill, Certificate of Analysis (COA), Delivery Docket/Manifest, Import Receipt of purchase/Tax Invoice, Import specific meat/meat product movement forms, Third Party Cold Store production management system Delivery Docket/Manifest,	
Docket/Manifest number	to the docket for identification purposes.	Tes	Third Party Cold Store production management system	
Food Control Certificate entry number	This is a number assigned to the entry of a shipment of goods imported by the same owner at the same time which can be described by one import entry.	Yes	Imported Food Inspection Advice, Third Party Cold Store production management system	
From Establishment number	A number issued by Federal and State Authorities to identify the originating site from which meat or meat products were distributed to domestic or export markets. For transfer certificates, the Establishment numbers for both the dispatching and receiving establishments are recorded.	Yes	Carcase Ticket, Carton label, Certificate of Analysis (COA), Delivery Docket/Manifest, SSCC/Pallet label, Third Party Cold Store production management system	
From property identifier	The identification of the property (may be a PIC) from/to where the livestock or product were consigned.	Yes	Import specific meat/meat product movement forms, Third Party Cold Store production management system	
Global Trade Item Number (GTIN)	Encoded in the GS1 barcode, the GTIN is a globally unique 14-digit number used to identify trade items, products, or services.	Yes	Carcase Ticket, Carton label, SSCC/Pallet label, Third Party Cold Store production management system	For more information visit the GS1 website.
GTIN of Contained Trade Items	Encoded in the GS1 barcode, the GTIN of the contained trade items is a globally unique 14-digit number used to identify trade items, products, or services in the logistic unit.	Yes	SSCC/Pallet label, Third Party Cold Store production management system	For more information visit the GS1 website.
Import Permit Number	A unique permit number is allocated for the import consignment following submission of correct and validated documentation approved by the importing country.	Yes	Import Permit	

		Max		
Imported Food	A unique certificate number issued	Yes	Imported Food Inspection	
Inspection Advice	for traceability purposes.		Advice, Third Party Cold	
certificate number			Store production	
			management system	
Lot number	A lot is a number assigned by the	Yes	Carcase Ticket, Third Party	
	processor to each group of cattle		Cold Store production	
	consigned to slaughter and is		management system	
	usually vendor specific.			
Meat/meat product	A unique certificate number issued	Yes	Import specific meat/meat	
movement form	for traceability purposes.		product movement forms,	
number			Third Party Cold Store	
			production management	
			system	
Movement date	The date on which livestock or	Yes	Bill of lading/Air Waybill,	
	other products (e.g., feed or meat		Certificate of Analysis	
	products) were transported		(COA), Delivery	
	between PICs/establishments.		Docket/Manifest, Import	
			specific meat/meat	
			product movement forms,	
			Third Party Cold Store	
			production management	
			system	
Net Weight	Usually encoded in the GS1	Yes	Bill of lading/Air Waybill,	For more
(Kilograms)	barcode, the Net Weight is a		Carcase Ticket, Carton	information
(variable measure of the trade item		label, SSCC/Pallet label,	visit the GS1 website.
	e.g., carton, pallet or shipment		Third Party Cold Store	website.
	recorded in kilograms.		production management	
			system	
Official mark	Any stamp, seal, label, or mark that	Yes	Carcase Ticket, Carton	
	is declared by the regulations to be		label, SSCC/Pallet label,	
	an official mark. An official mark		Third Party Cold Store	
	signifies that the product has been		production management	
	inspected by and approved as safe		system	
	for human consumption by an		System	
	Authorised Officer.			
Order date	This is the date on which the	Yes	Delivery Docket/Manifest,	
	purchase order or contract was	105	Third Party Cold Store	
	raised by the buyer.		production management	
	raised by the buyer.		system	
Packaging Date	Encoded in the GS1 barcode, the	Yes	Carton label, Certificate of	For more
i acraging Date	Packaging Date is the date on	163	Analysis (COA), SSCC/Pallet	information
	which the item was packaged and		label, Third Party Cold	visit the GS1
	is recorded in the format year,		Store production	website.
	month, day (YYMMDD).			
Dackaging Data	This includes the oldest and newest	Yes	management system SSCC/Pallet label, Third	For more
Packaging Date		res		information
Range	packaging dates for the logistic		Party Cold Store	visit the GS1
	unit.		production management	website.
		N -	system	For more
Pallet Serial Shipping	Encoded in the GS1 barcode, this is	Yes	Import specific meat/meat	For more information
Container Code	a unique number which identifies		product movement forms,	visit the GS1
(SSCC)	the individual logistic unit i.e.,		SSCC/Pallet label, Third	website.
	pallet that is assigned by the		Party Cold Store	
	establishment constructing the			

	unit. The SSCC remains the same		production management	
Production Date (YYMMDD)	for the life of the logistic unit. Encoded in the GS1 barcode, this is the 'kill' or slaughter' date of the product and is recorded in the format year, month, day (YYMMDD).	Yes	system Carcase Ticket, Certificate of Analysis (COA), Import specific meat/meat product movement forms, Third Party Cold Store production management	For more information visit the GS1 website.
Recipient Business Number	This is a unique registration number, used to identify businesses.	Yes	system Import Receipt of purchase/Tax Invoice, Third Party Cold Store production management system	
Seal Serial Number	This is a unique serial number printed on any tamper-evident seal issued by the Department.	Yes	Bill of lading/Air Waybill, Third Party Cold Store production management system	For more information visit the Australian Government Federal Register of Legislation.
Seller/Supplier Business Number	This is a unique registration number, used to identify businesses.	Yes	Import Receipt of purchase/Tax Invoice, Third Party Cold Store production management system	
Serial Number	Encoded in the GS1 barcode, this is a code, numeric or alphanumeric, assigned to an individual instance of an item for its lifetime.	Yes	Carcase Ticket, Carton label, Third Party Cold Store production management system	For more information visit the GS1 website.
Shipping Mark	Also known as a port mark, this is a code comprising of three letters representing the foreign establishment number and the last nine digits of the consignment SSCC.	Yes	Bill of lading/Air Waybill, Certificate of Analysis (COA), Delivery Docket/Manifest, SSCC/Pallet label, Third Party Cold Store production management system	
To property identifier	The identification of the property (may be a PIC) from/to where the livestock or product were consigned.	Yes	Import specific meat/meat product movement forms, Third Party Cold Store production management system	
Trade description	This is a collective set of words that says what the product is and may include information such as species, net weight of product, name and address of establishments, category ciphers, market endorsements, MSA eating quality etc.	Yes	Carcase Ticket, Carton label, Delivery Docket/Manifest, SSCC/Pallet label, Third Party Cold Store production management system	
Transport registration number	The registration number of the vehicle in which the animals or product were transported. For	Yes	Bill of lading/Air Waybill, Delivery Docket/Manifest, Import specific meat/meat	

ents of product this will be a group of product this will be a group of the second sec		oduct movement forms, ird Party Cold Store	
		oduction management	
	sys	stem	

5.2.6.6.3 Physical Outputs including Critical Tracking Events (CTEs)

Product exiting cold stores which is transferred along the supply chain ranges from carcases to pallets of meat/meat products. Critical Tracking Event Documentation required here may include labels such as the Carcase Ticket or Pallet Label, Import specific meat/meat product movement forms and Delivery Dockets.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with the outputs of the import third party cold store system include the movement of:

- * Carcase
- * Carton
- * Pallet

off the property, premises, or supply chain sector.

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Carcase	The body of a slaughtered animal after bleeding. Becomes a dressed carcase when hide, head, feet and offal are removed.	Carcase Ticket, Delivery Docket/Manifest, Import specific meat/meat product movement forms, Third Party Cold Store production management system, Import Receipt of purchase/Tax Invoice	
Carton	This is a case, crate, or barrel of product.	Carton label, Delivery Docket/Manifest, Import specific meat/meat product movement forms, Third Party Cold Store production management system, Import Receipt of purchase/Tax Invoice	
Pallet	A logistic unit which includes a number of cartons or goods items packed together for transport or storage purposes.	Delivery Docket/Manifest, Import specific meat/meat product movement forms, Third Party Cold Store production management system, Import Receipt of purchase/Tax Invoice, SSCC/Pallet label	

Table 161. Physical outputs and associated Critical Tracking Event related documents for a beef import third party inspection system.

5.2.6.6.4 Information Outputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). Key Data Elements from cold store CTE related documentation will be stored in the production management system. Such information may include, but not be limited to, GS1 barcode application identifiers, movement dates, product net weight, seal serial numbers and import specific meat/meat product movement certificate numbers.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Batch number	This is a unique number which identifies products sharing certain production characteristics and is used for traceability purposes.	Yes	Carcase Ticket, Third Party Cold Store production management system	
Body number	This is a number assigned to each carcase by the processor for identification purposes.	Yes	Carcase Ticket, Third Party Cold Store production management system	
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Carton label, Import Receipt of purchase/Tax Invoice, SSCC/Pallet label, Third Party Cold Store production management system	
Consignment Serial Shipping Container Code (SSCC)	Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., shipment/message that is assigned by the establishment constructing the unit. The SSCC remains the same for the life of the logistic unit.	Yes	Import specific meat/meat product movement forms, SSCC/Pallet label, Third Party Cold Store production management system	For more information visit the GS1 website.
Contract number	This is a unique number allocated to the contract by the seller.	Yes	Delivery Docket/Manifest, Third Party Cold Store production management system	
Count of Trade Items	Usually encoded in the GS1 barcode, this is the number of trade items e.g., cartons in the logistic unit.	Yes	Delivery Docket/Manifest, SSCC/Pallet label, Third Party Cold Store production management system	For more information visit the GS1 website.
Date	This is the date of signing or of which a record entry or transaction was made.	Yes	Delivery Docket/Manifest, Import Receipt of purchase/Tax Invoice, Import specific meat/meat product movement forms, Third Party Cold Store production management system	
Delivery Docket/Manifest number	This is a unique number allocated to the docket for identification purposes.	Yes	Delivery Docket/Manifest, Third Party Cold Store production management system	
From Establishment number	A number issued by Federal and State Authorities to identify the originating site from which meat or meat products were distributed to domestic or export markets. For transfer certificates, the Establishment numbers for both the dispatching and receiving establishments are recorded.	Yes	Carcase Ticket, Carton label, Delivery Docket/Manifest, SSCC/Pallet label, Third Party Cold Store production management system	

From property	The identification of the property (may be	Yes	Import specific	
From property identifier	a PIC) from/to where the livestock or	res	meat/meat product	
lacitation	product were consigned.		movement forms, Third	
			Party Cold Store	
			production management	
			system	
Global Trade Item	Encoded in the GS1 barcode, the GTIN is a	Yes	Carcase Ticket, Carton	For more
Number (GTIN)	globally unique 14-digit number used to		label, SSCC/Pallet label,	information visit the
	identify trade items, products, or services.		Third Party Cold Store	GS1
			production management	website.
GTIN of	Encoded in the GS1 barcode, the GTIN of	Yes	system SSCC/Pallet label, Third	For more
Contained Trade	the contained trade items is a globally	res	Party Cold Store	information
Items	unique 14-digit number used to identify		production management	visit the
items	trade items, products, or services in the		system	GS1 website.
	logistic unit.		System	website.
Lot number	A lot is a number assigned by the	Yes	Carcase Ticket, Third Party	
	processor to each group of cattle		Cold Store production	
	consigned to slaughter and is usually		management system	
	vendor specific.			
Meat/meat	A unique certificate number issued for	Yes	Import specific	
product	traceability purposes.		meat/meat product	
movement form			movement forms, Third	
number			Party Cold Store	
			production management	
Movement date	The date on which livestock or other	Vaa	system	
wovement date		Yes	Delivery Docket/Manifest,	
	products (e.g., feed or meat products)		Import specific meat/meat product	
	were transported between PICs/establishments.		movement forms, Third	
			Party Cold Store	
			production management	
			system	
Net Weight	Usually encoded in the GS1 barcode, the	Yes	Carcase Ticket, Carton	For more
(Kilograms)	Net Weight is a variable measure of the		label, SSCC/Pallet label,	information visit the
	trade item e.g., carton, pallet or shipment		Third Party Cold Store	<u>GS1</u>
	recorded in kilograms.		production management	website.
			system	
Official mark	Any stamp, seal, label, or mark that is	Yes	Carcase Ticket, Carton	
	declared by the regulations to be an		label, SSCC/Pallet label,	
	official mark. An official mark signifies that		Third Party Cold Store	
	the product has been inspected by and		production management	
	approved as safe for human consumption		system	
Order date	by an Authorised Officer. This is the date on which the purchase	Yes	Delivery Docket/Manifest,	
	order or contract was raised by the buyer.	162	Third Party Cold Store	
	order of contract was raised by the buyer.		production management	
			production management	1
			system	
Packaging Date	Encoded in the GS1 barcode, the	Yes	system Carton label, SSCC/Pallet	For more
Packaging Date	Encoded in the GS1 barcode, the Packaging Date is the date on which the	Yes	system Carton label, SSCC/Pallet label, Third Party Cold	information
Packaging Date		Yes	Carton label, SSCC/Pallet	

Packaging Date	This includes the oldest and newest	Yes	SSCC/Pallet label, Third	For more
Range	packaging dates for the logistic unit.		Party Cold Store	information
0			production management	<u>visit the</u> GS1
			system	website.
Pallet Serial	Encoded in the GS1 barcode, this is a	Yes	Import specific	For more
Shipping	unique number which identifies the		meat/meat product	information
Container Code	individual logistic unit i.e., pallet that is		movement forms,	<u>visit the</u> GS1
(SSCC)	assigned by the establishment		SSCC/Pallet label, Third	website.
	constructing the unit. The SSCC remains		Party Cold Store	
	the same for the life of the logistic unit.		production management	
			system	
Production Date	Encoded in the GS1 barcode, this is the	Yes	Carcase Ticket, Import	For more
(YYMMDD)	'kill' or slaughter' date of the product and		specific meat/meat	information visit the
	is recorded in the format year, month, day		product movement forms,	<u>GS1</u>
	(YYMMDD).		Third Party Cold Store	website.
			production management	
			system	
Recipient	This is a unique registration number, used	Yes	Import Receipt of	
Business Number	to identify businesses.		purchase/Tax Invoice,	
			Third Party Cold Store	
			production management	
			system	
Seller/Supplier	This is a unique registration number, used	Yes	Import Receipt of	
Business Number	to identify businesses.		purchase/Tax Invoice,	
			Third Party Cold Store	
			production management	
			system	
Serial Number	Encoded in the GS1 barcode, this is a code,	Yes	Carcase Ticket, Carton	For more
	numeric or alphanumeric, assigned to an		label, Third Party Cold	information visit the
	individual instance of an item for its		Store production	<u>GS1</u>
	lifetime.		management system	website.
Shipping Mark	Also known as a port mark, this is a code	Yes	Delivery Docket/Manifest,	
	comprising of three letters representing		SSCC/Pallet label, Third	
	the foreign establishment number and the		Party Cold Store	
	last nine digits of the consignment SSCC.		production management	
			system	
To property	The identification of the property (may be	Yes	Import specific	
identifier	a PIC) from/to where the livestock or		meat/meat product	
	product were consigned.		movement forms, Third	
			Party Cold Store	
			production management	
			system	
Trade description	This is a collective set of words that says	Yes	Carcase Ticket, Carton	
	what the product is and may include		label, Delivery	
	information such as species, net weight of		Docket/Manifest,	
	product, name and address of		SSCC/Pallet label, Third	
	establishments, category ciphers, market		Party Cold Store	
	endorsements, MSA eating quality etc.		production management	
			system	
Transport	The registration number of the vehicle in	Yes	Delivery Docket/Manifest,	
registration	which the animals or product were		Import specific	
number	transported. For shipments of product this		meat/meat product	
	will be a shipping container number.		movement forms, Third	

Party Cold Store	
production management	
system	

5.2.6.6.5 Regulatory and Industry Programs

- * Importing Country Government System
- * Other data sources

5.2.6.6.6 Supply Chain Node Traceability

The traceability of product in an importing country third-party cold store back to the live animal and property of origin is dependent on the form in which product enters the storage premises. This may include whole carcase, cartoned or palletised form.

Traceability of whole carcases back to the live animal is possible and can be done by the processing establishment where the animal was slaughtered as importers of livestock are required to demonstrate that animals remain traceable throughout the supply chain up to the point of slaughter. Here, carcases are issued a carcase ticket which correlates to the live animal identifier and contains key information, including GS1 meat industry barcode, body number, processing establishment number and production date or 'kill date'. Thus, whole carcases (identified with a unique serialised carcase ticket) within a processing facility, chiller, cold store, or other premises (e.g., retail) are fully traceable back to the individual live animal and property of origin.

Traceability for cartoned and palletised product is limited to the carcases that have entered the boning room for the production run of cartons that are created. For example, 200 carcases (400 sides) individually identified with unique carcase tickets enter the boning room for a specific boning run. These carcase tickets are linked to the specific boning run. From these carcases, 3 200 cartons of primal cuts and 1 000 cartons of trim and other highly mixed products are created. While all cartons are identified with unique serialised carton labels, including a GS1 meat industry barcode, linked to the boning run (and may be packaged into pallets containing unique serialised pallet labels including a GS1 SSCC barcode), it is not readily possible to identify which carcases are in which cartons as the cartons will contain meat products from different carcases. If the carcases were sourced from several different properties, the resulting carton can only be traced to a number of possible carcases and source properties. In logistical systems such as transport and cold stores, cartons are typically processed by pallets with only the pallet label being scanned. Therefore, traceability through logistics is often at the pallet level.

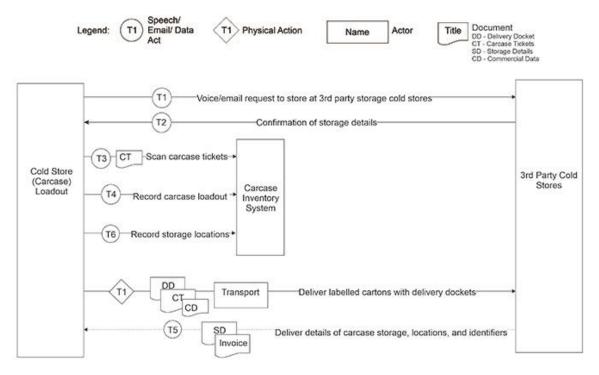
5.2.6.6.7 Data flow diagrams

Direction	Description	
Input	Cold Store (Carcase) to Third party cold store	
Input	Cold Store (Carton) to Third party cold store	
Output	Third party cold store to Supermarket	
Output	Third party cold store to Butcher	

Table 162. Data flow diagrams for the inputs and outputs of a beef third party cold store system

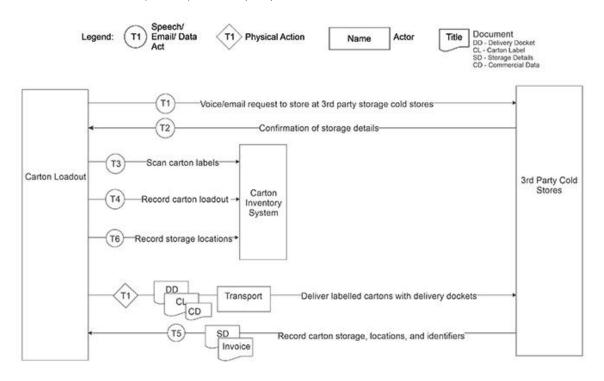
Output	Third party cold store to Food Service
Output	Third party cold store to Value Added
Output	Third party cold store to Export

5.2.6.6.7.1 Cold Store (Carcase) to Third party cold store



Carcase Loadout to 3rd Party Storage Cold Stores

Figure 180. Data or information flows from the import carcase loadout to import third party cold store systems in the beef supply chain.

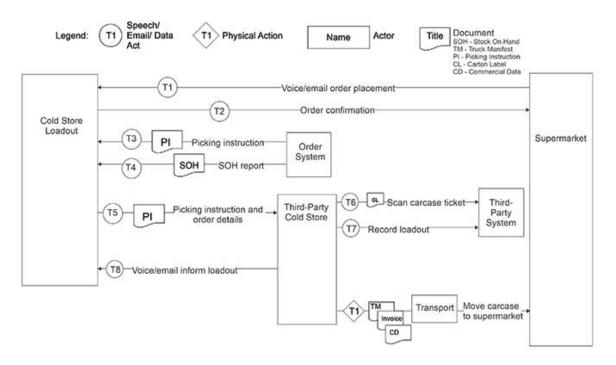


5.2.6.6.7.2 Cold Store (Carton) to Third party cold store

Carton Loadout to 3rd Party Storage Cold Stores

Figure 181. Data or information flows from the import carton loadout to import third party cold store systems in the beef supply chain.

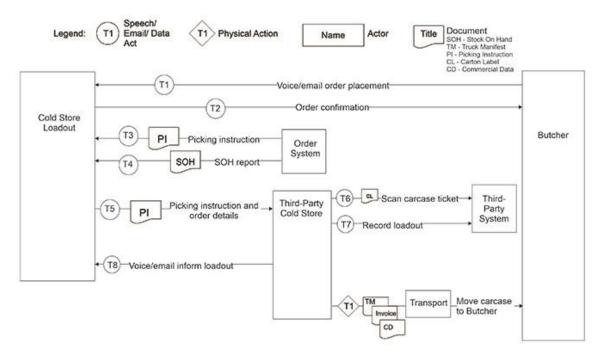
5.2.6.6.7.3 Third party cold store to Supermarket



Third-Party Cold Store to Supermarket

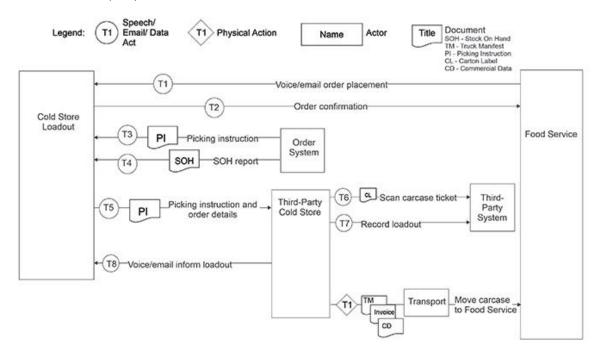
Figure 182. Data or information flows from the import third party cold store to import supermarket systems in the beef supply chain.

5.2.6.6.7.4 Third party cold store to Butcher



Third-Party Cold Store to Butcher

Figure 183. Data or information flows from the import third party cold store to import butcher systems in the beef supply chain.

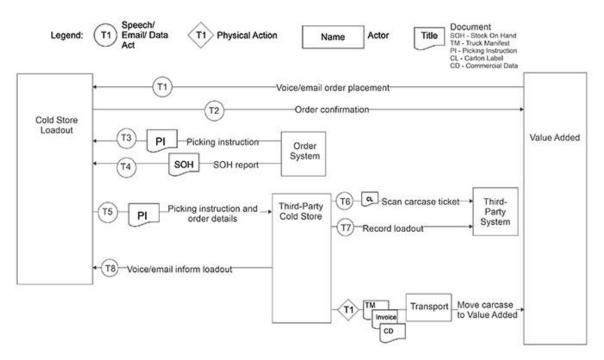


5.2.6.6.7.5 Third party cold store to Food Service

Third-Party Cold Store to Food Service

Figure 184. Data or information flows from the import third party cold store to import food service systems in the beef supply chain.

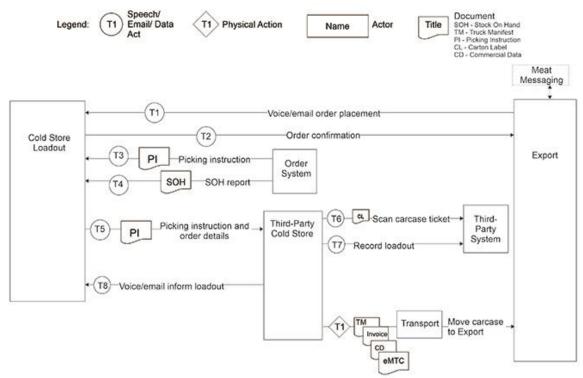
5.2.6.6.7.6 Third party cold store to Value Added



Third-Party Cold Store to Value Added

Figure 185. Data or information flows from the import third party cold store to import value added systems in the beef supply chain.

5.2.6.6.7.7 Third party cold store to Export



Third-Party Cold Store to Export

Figure 186. Data or information flows from the import third party cold store to export systems in the beef supply chain.

5.2.6.7 Import supermarket

Supermarkets are product distribution centres whereby retail-ready product is sourced from suppliers (processors or third-party cold store) or product is prepared on-site from carcase or cartoned product. These distribution centres may be chain or retail stores which assemble these goods, sourced from individual suppliers, for purchase by consumers. Product may be pre-packaged and branded by the supplier or by the supermarket and each item identified with a retail-ready product label.

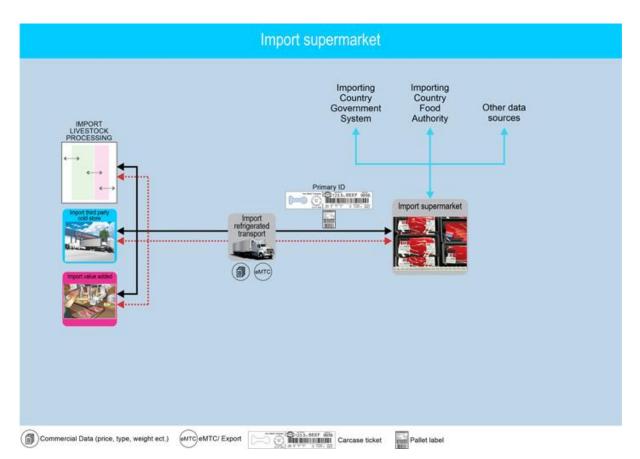


Figure 187. Inputs and outputs of the beef supply chain import supermarket sector.

5.2.6.7.1 Physical Inputs including Critical Tracking Events (CTEs)

The inputs for import supermarkets include meat product in carcase form for onsite butchering as well as prepackaged product from processors and value adding facilities. Critical Tracking Event related documentation for the movement of product into supermarkets includes standard movement documentation such as the Delivery Docket/Manifest, import specific meat/meat product movement forms, carton, and pallet labels.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with inputs to the import supermarket system include the receival of:

- * Carcase
- * Carton
- * Pallet.

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Carcase	The body of a slaughtered animal after bleeding. Becomes a dressed carcase when hide, head, feet and offal are removed.	Carcase Ticket, Delivery Docket/Manifest, Import specific meat/meat product movement forms, Retail production management system, Import Receipt of purchase/Tax Invoice	
Carton	This is a case, crate, or barrel of product.	Carton label, Delivery Docket/Manifest, Import specific meat/meat product movement forms, Retail production management system, Import Receipt of purchase/Tax Invoice	
Pallet	A logistic unit which includes a number of cartons or goods items packed together for transport or storage purposes.	Delivery Docket/Manifest, Import specific meat/meat product movement forms, Retail production management system, Import Receipt of purchase/Tax Invoice, SSCC/Pallet label	

Table 163. Physical inputs and associated Critical Tracking Event related documents for a beef import supermarket system.

5.2.6.7.2 Information Inputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). Information inputs or KDEs for the movement of meat product into the supermarket can be found on Critical Tracking Event related documentation and may be stored in the retailer's production management system.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Batch number	This is a unique number which identifies products sharing certain production characteristics and is used for traceability purposes.	Yes	Carcase Ticket, Retail production management system	
Body number	This is a number assigned to each carcase by the processor for identification purposes.	Yes	Carcase Ticket, Retail production management system	
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Carton label, Import Receipt of purchase/Tax Invoice, Retail production management system, SSCC/Pallet label	
Consignment Serial Shipping Container Code (SSCC)	Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., shipment/message that is assigned by the establishment constructing the unit. The SSCC remains the same for the life of the logistic unit.	Yes	Import specific meat/meat product movement forms, Retail production management system, SSCC/Pallet label	For more information visit the GS1 website.

Table 164. Information inputs, Key Data Elements and Critical Tracking Event related documentation for a beef import supermarket system.

Contract number	This is a unique number allocated to the contract by the seller.	Yes	Delivery Docket/Manifest, Retail production management system	
Count of Trade Items	Usually encoded in the GS1 barcode, this is the number of trade items e.g., cartons in the logistic unit.	Yes	Delivery Docket/Manifest, Retail production management system, SSCC/Pallet label	For more information visit the GS1 website.
Date	This is the date of signing or of which a record entry or transaction was made.	Yes	Delivery Docket/Manifest, Import Receipt of purchase/Tax Invoice, Import specific meat/meat product movement forms, Retail production management system	
Delivery Docket/Manifest number	This is a unique number allocated to the docket for identification purposes.	Yes	Delivery Docket/Manifest, Retail production management system	
From Establishment number	A number issued by Federal and State Authorities to identify the originating site from which meat or meat products were distributed to domestic or export markets. For transfer certificates, the Establishment numbers for both the dispatching and receiving establishments are recorded.	Yes	Carcase Ticket, Carton label, Delivery Docket/Manifest, Retail production management system, SSCC/Pallet label	
From property identifier	The identification of the property (may be a PIC) from/to where the livestock or product were consigned.	Yes	Import specific meat/meat product movement forms, Retail production management system	
Global Trade Item Number (GTIN)	Encoded in the GS1 barcode, the GTIN is a globally unique 14-digit number used to identify trade items, products, or services.	Yes	Carcase Ticket, Carton label, Retail production management system, SSCC/Pallet label	For more information visit the GS1 website.
GTIN of Contained Trade Items	Encoded in the GS1 barcode, the GTIN of the contained trade items is a globally unique 14-digit number used to identify trade items, products, or services in the logistic unit.	Yes	Retail production management system, SSCC/Pallet label	For more information visit the GS1 website.
Lot number	A lot is a number assigned by the processor to each group of cattle consigned to slaughter and is usually vendor specific.	Yes	Carcase Ticket, Retail production management system	
Meat/meat product movement form number	A unique certificate number issued for traceability purposes.	Yes	Import specific meat/meat product movement forms,	

			Dotoil are duction	
			Retail production	
			management system	
Movement date	The date on which livestock or other	Yes	Delivery	
	products (e.g., feed or meat products)		Docket/Manifest,	
	were transported between		Import specific	
	PICs/establishments.		meat/meat product	
			movement forms,	
			Retail production	
			management system	
Net Weight	Usually encoded in the GS1 barcode, the	Yes	Carcase Ticket,	For more
(Kilograms)	Net Weight is a variable measure of the	105	Carton label, Retail	information
(Kilograms)	trade item e.g., carton, pallet or shipment		production	visit the GS1
			•	website.
	recorded in kilograms.		management system,	
			SSCC/Pallet label	
Official mark	Any stamp, seal, label, or mark that is	Yes	Carcase Ticket,	
	declared by the regulations to be an		Carton label, Retail	
	official mark. An official mark signifies		production	
	that the product has been inspected by		management system,	
	and approved as safe for human		SSCC/Pallet label	
	consumption by an Authorised Officer.			
Order date	This is the date on which the purchase	Yes	Delivery	
	order or contract was raised by the buyer.		, Docket/Manifest,	
			Retail production	
			management system	
Packaging Date	Encoded in the GS1 barcode, the	Yes	Carton label, Retail	For more
Packaging Date		res		information
	Packaging Date is the date on which the		production	visit the GS1
	item was packaged and is recorded in the		management system,	website.
	format year, month, day (YYMMDD).		SSCC/Pallet label	_
Packaging Date	This includes the oldest and newest	Yes	Retail production	For more information
Range	packaging dates for the logistic unit.		management system,	visit the GS1
			SSCC/Pallet label	website.
Pallet Serial Shipping	Encoded in the GS1 barcode, this is a	Yes	Import specific	For more
Container Code	unique number which identifies the		meat/meat product	information
(SSCC)	individual logistic unit i.e., pallet that is		movement forms,	visit the GS1 website.
· · ·	assigned by the establishment		Retail production	wobonto.
	constructing the unit. The SSCC remains		management system,	
	the same for the life of the logistic unit.		SSCC/Pallet label	
Production Date	Encoded in the GS1 barcode, this is the	Yes	Carcase Ticket,	For more
(YYMMDD)	'kill' or slaughter' date of the product and	103	Import specific	information
(דוטווטוט)	- · ·			visit the GS1
	is recorded in the format year, month,		meat/meat product	website.
	day (YYMMDD).		movement forms,	
			Retail production	
		ļ	management system	
Recipient Business	This is a unique registration number, used	Yes	Import Receipt of	
Number	to identify businesses.		purchase/Tax Invoice,	
			Retail production	
			management system	
Seller/Supplier	This is a unique registration number, used	Yes	Import Receipt of	
Business Number	to identify businesses.		purchase/Tax Invoice,	
			Retail production	
Contal Neuroba		Ver	management system	For more
Serial Number	Encoded in the GS1 barcode, this is a	Yes	Carcase Ticket,	For more information
	code, numeric or alphanumeric, assigned		Carton label, Retail	

	to an individual instance of an item for its lifetime.		production management system	visit the GS1 website.
Shipping Mark	Also known as a port mark, this is a code comprising of three letters representing the foreign establishment number and the last nine digits of the consignment SSCC.	Yes	Delivery Docket/Manifest, Retail production management system, SSCC/Pallet label	
To property identifier	The identification of the property (may be a PIC) from/to where the livestock or product were consigned.	Yes	Import specific meat/meat product movement forms, Retail production management system	
Trade description	This is a collective set of words that says what the product is and may include information such as species, net weight of product, name and address of establishments, category ciphers, market endorsements, MSA eating quality etc.	Yes	Carcase Ticket, Carton label, Delivery Docket/Manifest, Retail production management system, SSCC/Pallet label	
Transport registration number	The registration number of the vehicle in which the animals or product were transported. For shipments of product this will be a shipping container number.	Yes	Delivery Docket/Manifest, Import specific meat/meat product movement forms, Retail production management system	

5.2.6.7.3 Physical Outputs including Critical Tracking Events (CTEs)

Retail ready meat products are the outputs of the supermarket system. Being purchased by consumers, CTE documentation includes the product label and receipt of purchase. Product exiting the system may be recorded in the retailer's production management system.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with the outputs of the import supermarket system include the movement of: * Retail Ready Product

off the property, premises, or supply chain sector.

Table 165. Physical outputs and associated Critical Tracking Event related documents for a beef import supermarket system.

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Retail	These are packaged meat products that	Import Receipt of purchase/Tax Invoice,	
Ready	are ready to be retailed and purchased	Retail product label, Retail production	
Product	by consumers.	management system	

5.2.6.7.4 Information Outputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). Information outputs from the supermarket system include KDEs which can be drawn from

CTE documentation such as the product label and receipt of purchase. This may include purchase date, product code and application identifiers on the GS1 barcode.

Table 166. Information outputs, Key Data Elements and Critical Tracking Event related documentation for a beef import supermarket
system.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Import Receipt of purchase/Tax Invoice, Retail production management system	
Date	This is the date of signing or of which a record entry or transaction was made.	Yes	Import Receipt of purchase/Tax Invoice, Retail production management system	
GS1 compliant numbering and barcode	Numbering and barcode compliant to the GS1 standards and as specified by the contract between the seller and the recipient i.e., retailer.	Yes	Retail product label, Retail production management system	
Recipient Business Number	This is a unique registration number, used to identify businesses.	Yes	Import Receipt of purchase/Tax Invoice, Retail production management system	
Seller/Supplier Business Number	This is a unique registration number, used to identify businesses.	Yes	Import Receipt of purchase/Tax Invoice, Retail production management system	

5.2.6.7.5 Regulatory and Industry Programs

- * Importing Country Government System
- * Importing Country Food Authority
- * Other data sources

5.2.6.7.6 Supply Chain Node Traceability

The traceability of imported retail ready product back to the live animal and property of origin is dependent on the form in which product enters the retail premises. This may include whole carcase, cartoned or palletised form. Further, the level of traceability for each input form is dependent on the packaging processes of the retailer and the traceability requirements of the importing country. For example, whole carcase product may or may not be fully traceable back to the live animal. Where this is true, carcases are broken down into retail cuts on site and may be packaged individually and labelled with a unique, serialised retail label. For this product, traceability back to the live animal is possible and can be done by the processing establishment where the animal was slaughtered as importers of livestock are required to demonstrate that animals remain traceable throughout the supply chain up to the point of slaughter. Here, carcases are issued a carcase ticket which correlates to the live animal identifier and contains key information, including GS1 meat industry barcode, body number, processing establishment number and production date or 'kill date'. Thus, there is the potential to trace whole carcases entering retail premises back to the individual live animal and property of origin. Where carcase retail cuts are not individually packaged or are derived from palletised or cartoned product, imported retail ready product may have

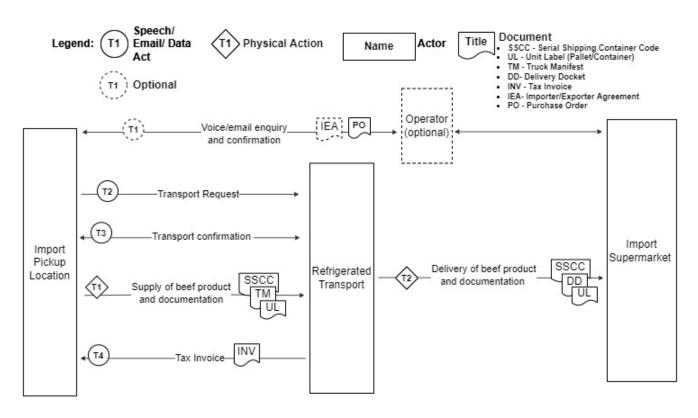
the same batch traceability limitations as per boning room and value-added product. Please refer to Boning room and Value Added 'Supply Chain Node Traceability' for more detailed information.

5.2.6.7.7 Data flow diagrams

Table 167. Data f	flow diaarams foi	r the inputs and	outputs of a	beef import system
Tuble 107. Dutu j	iow alagianis joi	i the inputs and	outputs of a	beej import system

Direction	Description	
Input	Import Refrigerated Transport	
Input	Import Third Party Cold Store to Import Supermarket	
Input	Import Value to Import Supermarket	

5.2.6.7.7.1 Import Livestock Processing to Import Supermarket



Import Refrigerated Transport

Figure 188. Data or information flows from import refrigerated transport systems in the beef supply chain.

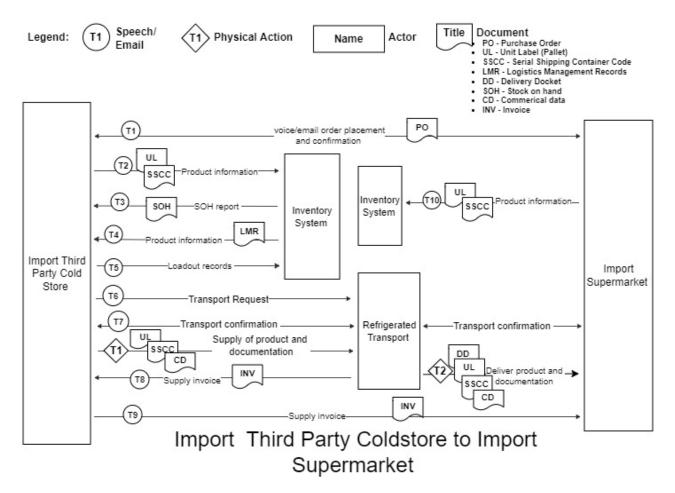
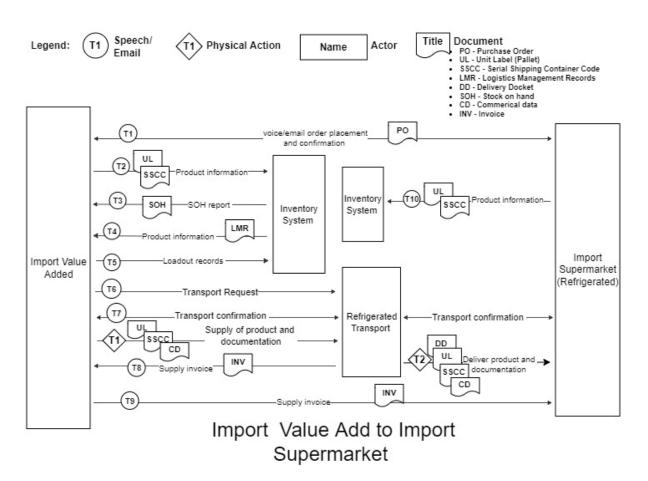




Figure 189. Data or information flows from the import third party cold store to import supermarket the beef supply chain.



5.2.6.7.7.3 Import Value to Import Supermarket

Figure 190. Data or information flows from the import value add to import supermarket systems in the beef supply chain.

5.2.6.8 Import butcher

Butchers are meat and meat product retail stores whereby carcase or cartoned product is sourced from processors, third-party cold stores, or value adders, and is prepared for sale to the consumer. This preparation may include value-adding processes whereby a new variety of cuts is provided, the presentation of products is altered, or additional ingredients are added to create new products or enhance the profitability of raw products. For example, cutting primal products into steaks, roasts, or diced products, marinating meat to save time for the consumer, as well as making specialty goods such as mixed sausages and offal.

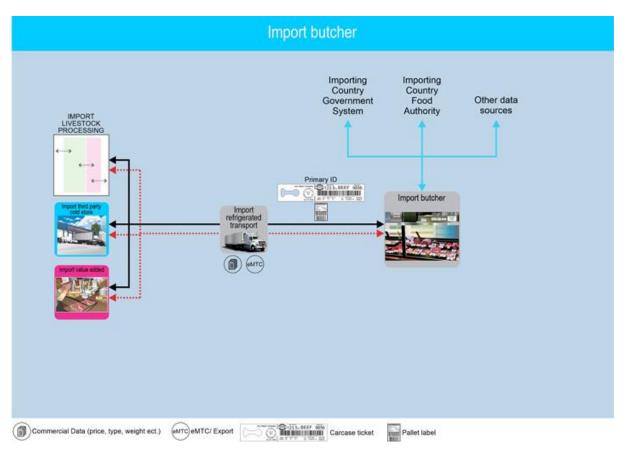


Figure 191. Inputs and outputs of the beef supply chain import butcher sector.

5.2.6.8.1 Physical Inputs including Critical Tracking Events (CTEs)

The inputs to the butcher system include meat product in carcase form for onsite butchering as well primal or value-added product from boning room and value adding facilities. Critical Tracking Event related documentation for the movement of product into butchers includes standard movement documentation such as the Delivery Docket/Manifest, import specific meat/meat product movement forms, carton, and pallet labels.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with inputs to the import butcher system include the receival of:

- * Carcase
- * Carton
- * Pallet.

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Carcase	The body of a slaughtered animal after bleeding. Becomes a dressed	Carcase Ticket, Delivery Docket/Manifest, Import specific meat/meat product movement forms,	

Table 168. Physical inputs and associated Critical Tracking Event related documents for a beef import butcher system.

	carcase when hide, head, feet and	Retail production management system, Import
	offal are removed.	Receipt of purchase/Tax Invoice
Carton	This is a case, crate, or barrel of	Carton label, Delivery Docket/Manifest, Import
	product.	specific meat/meat product movement forms,
		Retail production management system, Import
		Receipt of purchase/Tax Invoice
Pallet	A logistic unit which includes a	Delivery Docket/Manifest, Import specific
	number of cartons or goods items	meat/meat product movement forms, Retail
	packed together for transport or	production management system, Import Receipt of
	storage purposes.	purchase/Tax Invoice, SSCC/Pallet label

5.2.6.8.2 Information Inputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). Information inputs or KDEs for the movement of meat product into the butcher system can be found on Critical Tracking Event related documentation and may be stored in the retailer's production management system.

Table 169. Information inputs, Key I	y Data Elements and Critical Tracking Event related documentation for a be	ef import butcher system.
--------------------------------------	--	---------------------------

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Batch number	This is a unique number which identifies products sharing certain production characteristics and is used for traceability purposes.	Yes	Carcase Ticket, Retail production management system	
Body number	This is a number assigned to each carcase by the processor for identification purposes.	Yes	Carcase Ticket, Retail production management system	
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Carton label, Import Receipt of purchase/Tax Invoice, Retail production management system, SSCC/Pallet label	
Consignment Serial Shipping Container Code (SSCC)	Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., shipment/message that is assigned by the establishment constructing the unit. The SSCC remains the same for the life of the logistic unit.	Yes	Import specific meat/meat product movement forms, Retail production management system, SSCC/Pallet label	For more information visit the GS1 website.
Contract number	This is a unique number allocated to the contract by the seller.	Yes	Delivery Docket/Manifest, Retail production management system	
Count of Trade Items	Usually encoded in the GS1 barcode, this is the number of trade items e.g., cartons in the logistic unit.	Yes	Delivery Docket/Manifest, Retail production	For more information visit the GS1 website.

			management system, SSCC/Pallet label	
Date	This is the date of signing or of which a record entry or transaction was made.	Yes	Delivery Docket/Manifest, Import Receipt of purchase/Tax Invoice, Import specific meat/meat product movement forms, Retail production management system	
Delivery Docket/Manifest number	This is a unique number allocated to the docket for identification purposes.	Yes	Delivery Docket/Manifest, Retail production management system	
From Establishment number	A number issued by Federal and State Authorities to identify the originating site from which meat or meat products were distributed to domestic or export markets. For transfer certificates, the Establishment numbers for both the dispatching and receiving establishments are recorded.	Yes	Carcase Ticket, Carton label, Delivery Docket/Manifest, Retail production management system, SSCC/Pallet label	
From property identifier	The identification of the property (may be a PIC) from/to where the livestock or product were consigned.	Yes	Import specific meat/meat product movement forms, Retail production management system	
Global Trade Item Number (GTIN)	Encoded in the GS1 barcode, the GTIN is a globally unique 14-digit number used to identify trade items, products, or services.	Yes	Carcase Ticket, Carton label, Retail production management system, SSCC/Pallet label	For more information visit the GS1 website.
GTIN of Contained Trade Items	Encoded in the GS1 barcode, the GTIN of the contained trade items is a globally unique 14-digit number used to identify trade items, products, or services in the logistic unit.	Yes	Retail production management system, SSCC/Pallet label	For more information visit the GS1 website.
Lot number	A lot is a number assigned by the processor to each group of cattle consigned to slaughter and is usually vendor specific.	Yes	Carcase Ticket, Retail production management system	
Meat/meat product movement form number	A unique certificate number issued for traceability purposes.	Yes	Import specific meat/meat product movement forms, Retail production management system	
Movement date	The date on which livestock or other products (e.g., feed or meat products) were transported between PICs/establishments.	Yes	Delivery Docket/Manifest, Import specific meat/meat product movement forms,	

			Retail production	
			management system	
Net Weight	Usually encoded in the GS1 barcode, the	Yes	Carcase Ticket, Carton	For more
(Kilograms)	Net Weight is a variable measure of the	103	label, Retail	information
(Kilografiis)	trade item e.g., carton, pallet or		production	visit the GS1
	shipment recorded in kilograms.		management system,	website.
			SSCC/Pallet label	
Official mark	Any stamp, seal, label, or mark that is	Yes	Carcase Ticket, Carton	
	declared by the regulations to be an	Tes	label, Retail	
	official mark. An official mark signifies		production	
	that the product has been inspected by		management system,	
	and approved as safe for human		SSCC/Pallet label	
	consumption by an Authorised Officer.		SSCC/Fallet label	
Order date	This is the date on which the purchase	Yes	Delivery	
Order date	-	res	Docket/Manifest,	
	order or contract was raised by the			
	buyer.		Retail production	
Deele sins Dete	Freeded in the CC1 hereeds, the	Vaa	management system	For more
Packaging Date	Encoded in the GS1 barcode, the	Yes	Carton label, Retail	information
	Packaging Date is the date on which the		production	visit the GS1
	item was packaged and is recorded in the		management system,	website.
De alva alva a Data	format year, month, day (YYMMDD).	Vee	SSCC/Pallet label	For more
Packaging Date	This includes the oldest and newest	Yes	Retail production	information
Range	packaging dates for the logistic unit.		management system,	visit the GS1
			SSCC/Pallet label	website.
Pallet Serial Shipping	Encoded in the GS1 barcode, this is a	Yes	Import specific	For more information
Container Code	unique number which identifies the		meat/meat product	visit the GS1
(SSCC)	individual logistic unit i.e., pallet that is		movement forms,	website.
	assigned by the establishment		Retail production	
	constructing the unit. The SSCC remains		management system,	
	the same for the life of the logistic unit.		SSCC/Pallet label	_
Production Date	Encoded in the GS1 barcode, this is the	Yes	Carcase Ticket, Import	For more information
(YYMMDD)	'kill' or slaughter' date of the product and		specific meat/meat	visit the GS1
	is recorded in the format year, month,		product movement	website.
	day (YYMMDD).		forms, Retail	
			production	
			management system	
Recipient Business	This is a unique registration number,	Yes	Import Receipt of	
Number	used to identify businesses.		purchase/Tax Invoice,	
			Retail production	
			management system	
Seller/Supplier	This is a unique registration number,	Yes	Import Receipt of	
Business Number	used to identify businesses.		purchase/Tax Invoice,	
			Retail production	
			management system	
Serial Number	Encoded in the GS1 barcode, this is a	Yes	Carcase Ticket, Carton	For more
	code, numeric or alphanumeric, assigned		label, Retail	information visit the GS1
	to an individual instance of an item for its		production	website.
	lifetime.		management system	
Shipping Mark	Also known as a port mark, this is a code	Yes	Delivery	
	comprising of three letters representing		Docket/Manifest,	
	the foreign establishment number and		Retail production	
	the last nine digits of the consignment		management system,	
	SSCC.		SSCC/Pallet label	

To property identifier	The identification of the property (may be a PIC) from/to where the livestock or product were consigned.	Yes	Import specific meat/meat product movement forms, Retail production management system
Trade description	This is a collective set of words that says what the product is and may include information such as species, net weight of product, name and address of establishments, category ciphers, market endorsements, MSA eating quality etc.	Yes	Carcase Ticket, Carton label, Delivery Docket/Manifest, Retail production management system, SSCC/Pallet label
Transport registration number	The registration number of the vehicle in which the animals or product were transported. For shipments of product this will be a shipping container number.	Yes	Delivery Docket/Manifest, Import specific meat/meat product movement forms, Retail production management system

5.2.6.8.3 Physical Outputs including Critical Tracking Events (CTEs)

Retail ready meat products are the outputs of the butcher system. Being purchased by consumers, CTE documentation includes the product label and receipt of purchase. Product exiting the system may be recorded in the retailer's production management system.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with the outputs of the import butcher system include the movement of:

* Retail Ready Product

off the property, premises, or supply chain sector.

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Retail	These are packaged meat products that	Import Receipt of purchase/Tax Invoice,	
Ready	are ready to be retailed and purchased	Retail product label, Retail production	
Product	by consumers.	management system	

Table 170. Physical outputs and associated Critical Tracking Event related documents for a beef import butcher system.

5.2.6.8.4 Information Outputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). Information outputs from the butcher system include KDEs which can be drawn from CTE documentation such as the product label and receipt of purchase. This may include purchase date, product code and application identifiers on the GS1 barcode.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Import Receipt of purchase/Tax Invoice, Retail production management system	
Date	This is the date of signing or of which a record entry or transaction was made.	Yes	Import Receipt of purchase/Tax Invoice, Retail production management system	
GS1 compliant numbering and barcode	Numbering and barcode compliant to the GS1 standards and as specified by the contract between the seller and the recipient i.e., retailer.	Yes	Retail product label, Retail production management system	
Recipient Business Number	This is a unique registration number, used to identify businesses.	Yes	Import Receipt of purchase/Tax Invoice, Retail production management system	
Seller/Supplier Business Number	This is a unique registration number, used to identify businesses.	Yes	Import Receipt of purchase/Tax Invoice, Retail production management system	

Table 171. Information outputs, Key Data Elements and Critical Tracking Event related documentation for a beef import butcher system.

5.2.6.8.5 Regulatory and Industry Programs

- * Importing Country Government System
- * Importing Country Food Authority
- * Other data sources

5.2.6.8.6 Supply Chain Node Traceability

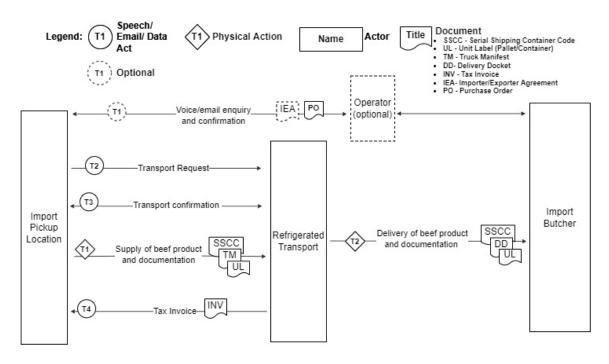
The traceability of imported retail ready product back to the live animal and property of origin is dependent on the form in which product enters the retail premises. This may include whole carcase, cartoned or palletised form. Further, the level of traceability for each input form is dependent on the packaging processes of the retailer and the traceability requirements of the importing country. For example, whole carcase product may or may not be fully traceable back to the live animal. Where this is true, carcases are broken down into retail cuts on site and may be packaged individually and labelled with a unique, serialised retail label. For this product, traceability back to the live animal is possible and can be done by the processing establishment where the animal was slaughtered as importers of livestock are required to demonstrate that animals remain traceable throughout the supply chain up to the point of slaughter. Here, carcases are issued a carcase ticket which correlates to the live animal identifier and contains key information, including GS1 meat industry barcode, body number, processing establishment number and production date or 'kill date'. Thus, there is the potential to trace whole carcases entering retail premises back to the individual live animal and property of origin. Where carcase retail cuts are not individually packaged or are derived from palletised or cartoned product, imported retail ready product may have the same batch traceability limitations as per boning room and value-added product. Please refer to Boning room and Value Added 'Supply Chain Node Traceability' for more detailed information.

5.2.6.8.7 Data flow diagrams

Table 172. Data flow diagrams for the inputs and outputs of a beef import butcher system

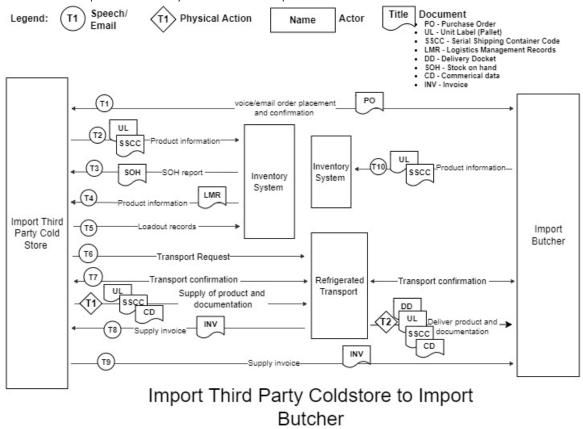
Direction	Description
Input	Import Refrigerated Transport
Input	Import Third Party Cold Store to Import Butcher
Input	Import Value Added to Import Butcher

5.2.6.8.7.1 Import Refrigerated Transport



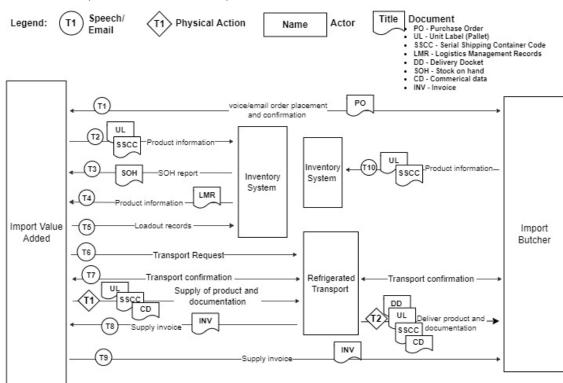
Import Refrigerated Transport

Figure 192. Data or information flow from import refrigerated transport systems in the beef supply chain.



5.2.6.8.7.2 Import Third Party Cold Store to Import Butcher

Figure 193. Data or information flows from the import third party cold store to import butcher



5.2.6.8.7.3 Import Value Added to Import Butcher

Import Value Added to Import Butcher

Figure 194. Data or information flows from the import value added to import butcher systems in the beef supply chain.

5.2.6.9 Import supermarket

Supermarkets are product distribution centres whereby retail-ready product is sourced from suppliers (processors or third-party cold store) or product is prepared on-site from carcase or cartoned product. These distribution centres may be chain or retail stores which assemble these goods, sourced from individual suppliers, for purchase by consumers. Product may be pre-packaged and branded by the supplier or by the supermarket and each item identified with a retail-ready product label.

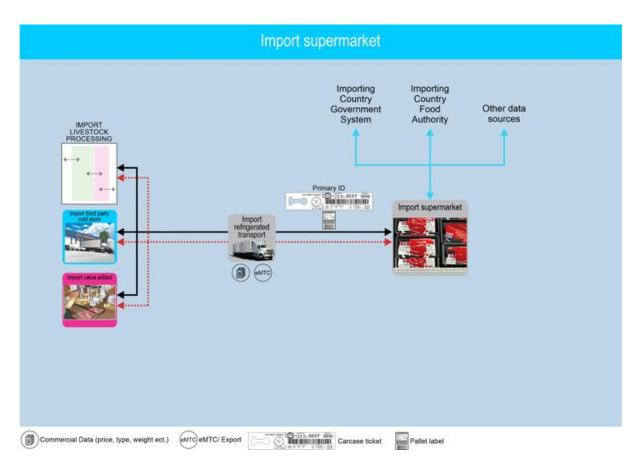


Figure 195. Inputs and outputs of the beef supply chain import supermarket sector.

5.2.6.9.1 Physical Inputs including Critical Tracking Events (CTEs)

The inputs for import supermarkets include meat product in carcase form for onsite butchering as well as prepackaged product from processors and value adding facilities. Critical Tracking Event related documentation for the movement of product into supermarkets includes standard movement documentation such as the Delivery Docket/Manifest, import specific meat/meat product movement forms, carton, and pallet labels.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with inputs to the import supermarket system include the receival of:

- * Carcase
- * Carton
- * Pallet.

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Carcase	The body of a slaughtered animal after bleeding. Becomes a dressed carcase when hide, head, feet and offal are removed.	Carcase Ticket, Delivery Docket/Manifest, Import specific meat/meat product movement forms, Retail production management system, Import Receipt of purchase/Tax Invoice	
Carton	This is a case, crate, or barrel of product.	Carton label, Delivery Docket/Manifest, Import specific meat/meat product movement forms, Retail production management system, Import Receipt of purchase/Tax Invoice	
Pallet	A logistic unit which includes a number of cartons or goods items packed together for transport or storage purposes.	Delivery Docket/Manifest, Import specific meat/meat product movement forms, Retail production management system, Import Receipt of purchase/Tax Invoice, SSCC/Pallet label	

Table 173. Physical inputs and associated Critical Tracking Event related documents for a beef import supermarket system.

5.2.6.9.2 Information Inputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). Information inputs or KDEs for the movement of meat product into the supermarket can be found on Critical Tracking Event related documentation and may be stored in the retailer's production management system.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Batch number	This is a unique number which identifies products sharing certain production characteristics and is used for traceability purposes.	Yes	Carcase Ticket, Retail production management system	
Body number	This is a number assigned to each carcase by the processor for identification purposes.	Yes	Carcase Ticket, Retail production management system	
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Carton label, Import Receipt of purchase/Tax Invoice, Retail production management system, SSCC/Pallet label	
Consignment Serial Shipping Container Code (SSCC)	Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., shipment/message that is assigned by the establishment constructing the unit. The SSCC remains the same for the life of the logistic unit.	Yes	Import specific meat/meat product movement forms, Retail production management system, SSCC/Pallet label	For more information visit the GS1 website.

Table 174. Information inputs, Key Data Elements and Critical Tracking Event related documentation for a beef import supermarket system.

Contract number	This is a unique number allocated to the contract by the seller.	Yes	Delivery Docket/Manifest, Retail production management system	
Count of Trade Items	Usually encoded in the GS1 barcode, this is the number of trade items e.g., cartons in the logistic unit.	Yes	Delivery Docket/Manifest, Retail production management system, SSCC/Pallet label	For more information visit the GS1 website.
Date	This is the date of signing or of which a record entry or transaction was made.	Yes	Delivery Docket/Manifest, Import Receipt of purchase/Tax Invoice, Import specific meat/meat product movement forms, Retail production management system	
Delivery Docket/Manifest number	This is a unique number allocated to the docket for identification purposes.	Yes	Delivery Docket/Manifest, Retail production management system	
From Establishment number	A number issued by Federal and State Authorities to identify the originating site from which meat or meat products were distributed to domestic or export markets. For transfer certificates, the Establishment numbers for both the dispatching and receiving establishments are recorded.	Yes	Carcase Ticket, Carton label, Delivery Docket/Manifest, Retail production management system, SSCC/Pallet label	
From property identifier	The identification of the property (may be a PIC) from/to where the livestock or product were consigned.	Yes	Import specific meat/meat product movement forms, Retail production management system	
Global Trade Item Number (GTIN)	Encoded in the GS1 barcode, the GTIN is a globally unique 14-digit number used to identify trade items, products, or services.	Yes	Carcase Ticket, Carton label, Retail production management system, SSCC/Pallet label	For more information visit the GS1 website.
GTIN of Contained Trade Items	Encoded in the GS1 barcode, the GTIN of the contained trade items is a globally unique 14-digit number used to identify trade items, products, or services in the logistic unit.	Yes	Retail production management system, SSCC/Pallet label	For more information visit the GS1 website.
Lot number	A lot is a number assigned by the processor to each group of cattle consigned to slaughter and is usually vendor specific.	Yes	Carcase Ticket, Retail production management system	
Meat/meat product movement form number	A unique certificate number issued for traceability purposes.	Yes	Import specific meat/meat product movement forms,	

			Dotoil are duction	
			Retail production	
			management system	
Movement date	The date on which livestock or other	Yes	Delivery	
	products (e.g., feed or meat products)		Docket/Manifest,	
	were transported between		Import specific	
	PICs/establishments.		meat/meat product	
			movement forms,	
			Retail production	
			management system	
Net Weight	Usually encoded in the GS1 barcode, the	Yes	Carcase Ticket,	For more
(Kilograms)	Net Weight is a variable measure of the	105	Carton label, Retail	information
(Kilograms)	trade item e.g., carton, pallet or shipment		production	visit the GS1
			•	website.
	recorded in kilograms.		management system,	
			SSCC/Pallet label	
Official mark	Any stamp, seal, label, or mark that is	Yes	Carcase Ticket,	
	declared by the regulations to be an		Carton label, Retail	
	official mark. An official mark signifies		production	
	that the product has been inspected by		management system,	
	and approved as safe for human		SSCC/Pallet label	
	consumption by an Authorised Officer.			
Order date	This is the date on which the purchase	Yes	Delivery	
	order or contract was raised by the buyer.		, Docket/Manifest,	
			Retail production	
			management system	
Packaging Date	Encoded in the GS1 barcode, the	Yes	Carton label, Retail	For more
Packaging Date		res		information
	Packaging Date is the date on which the		production	visit the GS1
	item was packaged and is recorded in the		management system,	website.
	format year, month, day (YYMMDD).		SSCC/Pallet label	_
Packaging Date	This includes the oldest and newest	Yes	Retail production	For more information
Range	packaging dates for the logistic unit.		management system,	visit the GS1
			SSCC/Pallet label	website.
Pallet Serial Shipping	Encoded in the GS1 barcode, this is a	Yes	Import specific	For more
Container Code	unique number which identifies the		meat/meat product	information
(SSCC)	individual logistic unit i.e., pallet that is		movement forms,	visit the GS1 website.
	assigned by the establishment		Retail production	website.
	constructing the unit. The SSCC remains		management system,	
	the same for the life of the logistic unit.		SSCC/Pallet label	
Production Date	Encoded in the GS1 barcode, this is the	Yes	Carcase Ticket,	For more
		res		information
(YYMMDD)	'kill' or slaughter' date of the product and		Import specific	visit the GS1
	is recorded in the format year, month,		meat/meat product	website.
	day (YYMMDD).		movement forms,	
			Retail production	
			management system	
Recipient Business	This is a unique registration number, used	Yes	Import Receipt of	
Number	to identify businesses.		purchase/Tax Invoice,	
			Retail production	
			management system	
Seller/Supplier	This is a unique registration number, used	Yes	Import Receipt of	
Business Number	to identify businesses.		purchase/Tax Invoice,	
			Retail production	
<u> </u>			management system	Fee man
Serial Number	Encoded in the GS1 barcode, this is a	Yes	Carcase Ticket,	For more information
	code, numeric or alphanumeric, assigned	1	Carton label, Retail	monnation

	to an individual instance of an item for its lifetime.		production management system	visit the GS1 website.
Shipping Mark	Also known as a port mark, this is a code comprising of three letters representing the foreign establishment number and the last nine digits of the consignment SSCC.	Yes	Delivery Docket/Manifest, Retail production management system, SSCC/Pallet label	
To property identifier	The identification of the property (may be a PIC) from/to where the livestock or product were consigned.	Yes	Import specific meat/meat product movement forms, Retail production management system	
Trade description	This is a collective set of words that says what the product is and may include information such as species, net weight of product, name and address of establishments, category ciphers, market endorsements, MSA eating quality etc.	Yes	Carcase Ticket, Carton label, Delivery Docket/Manifest, Retail production management system, SSCC/Pallet label	
Transport registration number	The registration number of the vehicle in which the animals or product were transported. For shipments of product this will be a shipping container number.	Yes	Delivery Docket/Manifest, Import specific meat/meat product movement forms, Retail production management system	

5.2.6.9.3 Physical Outputs including Critical Tracking Events (CTEs)

Retail ready meat products are the outputs of the supermarket system. Being purchased by consumers, CTE documentation includes the product label and receipt of purchase. Product exiting the system may be recorded in the retailer's production management system.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with the outputs of the import supermarket system include the movement of: * Retail Ready Product

off the property, premises, or supply chain sector.

Table 175. Physical outputs and associated Critical Tracking Event related documents for a beef import supermarket system.

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Retail	These are packaged meat products that	Import Receipt of purchase/Tax Invoice,	
Ready	are ready to be retailed and purchased	Retail product label, Retail production	
Product	by consumers.	management system	

5.2.6.9.4 Information Outputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). Information outputs from the supermarket system include KDEs which can be drawn from

CTE documentation such as the product label and receipt of purchase. This may include purchase date, product code and application identifiers on the GS1 barcode.

Table 176. Information outputs, Key Data Elements and Critical Tracking Event related documentation for a beef import supermarket system.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Import Receipt of purchase/Tax Invoice, Retail production management system	
Date	This is the date of signing or of which a record entry or transaction was made.	Yes	Import Receipt of purchase/Tax Invoice, Retail production management system	
GS1 compliant numbering and barcode	Numbering and barcode compliant to the GS1 standards and as specified by the contract between the seller and the recipient i.e., retailer.	Yes	Retail product label, Retail production management system	
Recipient Business Number	This is a unique registration number, used to identify businesses.	Yes	Import Receipt of purchase/Tax Invoice, Retail production management system	
Seller/Supplier Business Number	This is a unique registration number, used to identify businesses.	Yes	Import Receipt of purchase/Tax Invoice, Retail production management system	

5.2.6.9.5 Regulatory and Industry Programs

- * Importing Country Government System
- * Importing Country Food Authority
- * Other data sources

5.2.6.9.6 Supply Chain Node Traceability

The traceability of imported retail ready product back to the live animal and property of origin is dependent on the form in which product enters the retail premises. This may include whole carcase, cartoned or palletised form. Further, the level of traceability for each input form is dependent on the packaging processes of the retailer and the traceability requirements of the importing country. For example, whole carcase product may or may not be fully traceable back to the live animal. Where this is true, carcases are broken down into retail cuts on site and may be packaged individually and labelled with a unique, serialised retail label. For this product, traceability back to the live animal is possible and can be done by the processing establishment where the animal was slaughtered as importers of livestock are required to demonstrate that animals remain traceable throughout the supply chain up to the point of slaughter. Here, carcases are issued a carcase ticket which correlates to the live animal identifier and contains key information, including GS1 meat industry barcode, body number, processing establishment number and production date or 'kill date'. Thus, there is the potential to trace whole carcases entering retail premises back to the individual live animal and property of origin. Where carcase retail cuts are not

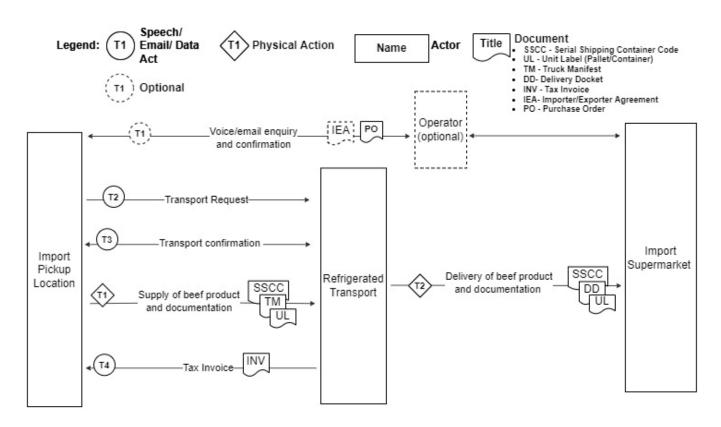
individually packaged or are derived from palletised or cartoned product, imported retail ready product may have the same batch traceability limitations as per boning room and value-added product. Please refer to Boning room and Value Added 'Supply Chain Node Traceability' for more detailed information.

5.2.6.9.7 Data flow diagrams

Table 177. Data flow diagrams for the inputs and outputs of a beef import supermarket system

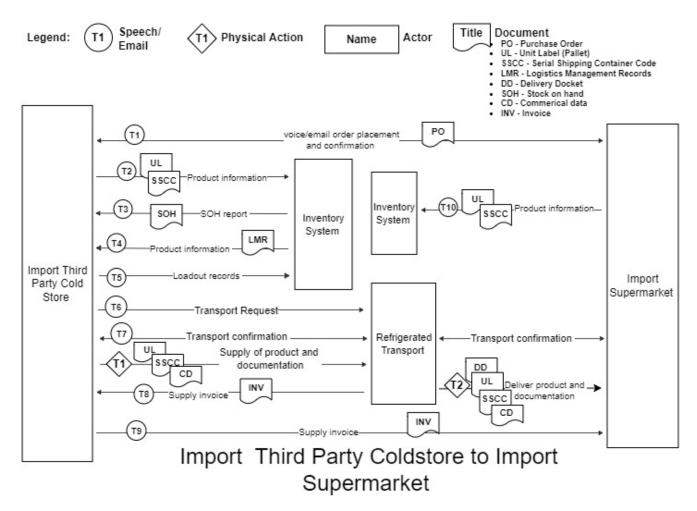
Direction	Description
Input	Import Refrigerated Transport
Input	Import Third Party Cold Store to Import Supermarket
Input	Import Value Added to Import Supermarket

5.2.6.9.7.1 Import Refrigerated Transport



Import Refrigerated Transport

Figure 196. Data or information flows from import refrigerated transport systems in the beef supply chain



5.2.6.9.7.2 Import Third Party Cold Stores to Import Supermarkets

Figure 197. Data or information flows from the import third party cold store to import supermarkets systems in the beef supply chain

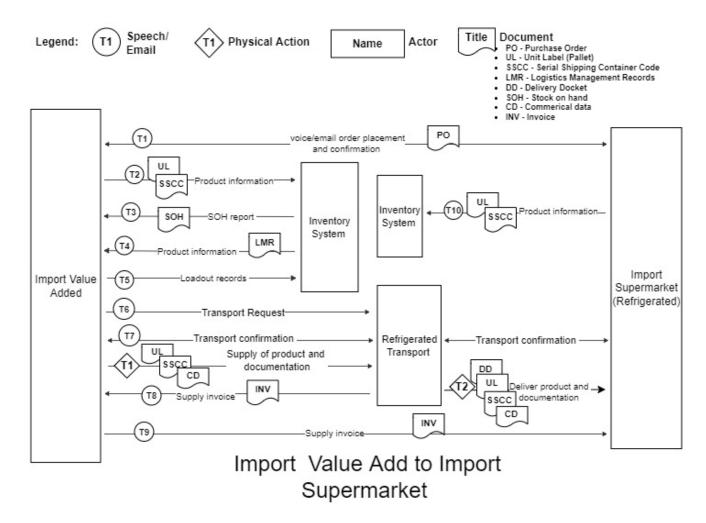


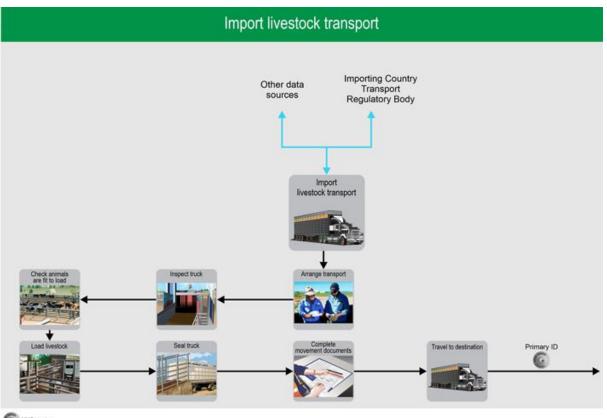


Figure 198. Data or information flows from the import value added to import supermarket systems in the beef supply chain

5.2.7 Importing Country - Cross-sector

5.2.7.1 Import livestock transport

Livestock transport is the process whereby animals are moved from one property to another by a mode of transport, most commonly truck. This journey requires careful preparation to ensure that animal stress, as well as any risks to welfare, are minimised. The importing country's livestock transport requirements and regulations are likely to be found within animal welfare standards and guidelines or legislation.



G NLIS ear tag

Figure 199. Inputs and outputs of the beef supply chain import livestock transport sector.

5.2.7.1.1 Physical Inputs including Critical Tracking Events (CTEs)

There are few physical inputs for the transportation of livestock. Inputs not only include the cattle, but those materials required to ensure that animal welfare standards and guidelines are met whilst livestock are in transit.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with inputs to the import livestock transport system include the receival of:

- * Cattle
- * Feed supplies and supplements.

Event related	Description of the inputs	Critical Tracking Event	More
to the inputs		(CTE) related documents	details
		(including electronic)	

Cattle	These are bovine livestock and may include any type of cattle e.g., cull cattle, calves etc.	Commercial supply contract, Import feed and water record, Import specific livestock movement forms, Import Receipt of purchase/Tax Invoice
Feed supplies and supplements	These are supplementary animal feed products such as hay or silage fodder, or mineral supplements which are provided to ensure the production efficiency and health of livestock are maintained. This may also include clean drinking water e.g., where livestock are in transit or at saleyards.	Import specific commodity movement forms, Import Receipt of purchase/Tax Invoice

5.2.7.1.2 Information Inputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). Information inputs for the movement of cattle are those related to the CTE documents and ensuring the health and welfare of the livestock themselves.

Table 179. Information inputs, Key Data Elements and Critical Tracking Event related documentation for a beef import livestock transport system.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Agreement date	This is the date on which an agreement between two parties was made.	Yes	Commercial supply contract	
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Import feed and water record, Import Receipt of purchase/Tax Invoice	
Contract number	This is a unique number allocated to the contract by the seller.	Yes	Commercial supply contract, Import specific commodity movement forms	
Date	This is the date of signing or of which a record entry or transaction was made.	Yes	Commercial supply contract, Import feed and water record, Import Receipt of purchase/Tax Invoice, Import specific commodity movement forms, Import specific livestock movement forms	
From property identifier	The identification of the property (may be a PIC) from/to where the livestock or product were consigned.	Yes	Import specific commodity movement forms, Import specific livestock movement forms	
Livestock Identifier	The importer of exported livestock must demonstrate that these livestock remain	Yes	Import specific livestock movement forms	

	traceable throughout the supply chain up to the point of slaughter. Livestock must be effectively identified, and all movements recorded to allow traceability back to the property of birth in the exporting country.		
Livestock movement	A unique certificate number issued for	Yes	Import specific livestock
form serial number	traceability purposes.		movement forms
Movement date	The date on which livestock or other products (e.g., feed or meat products) were transported between PICs/establishments.	Yes	Commercial supply contract, Import specific commodity movement forms, Import specific livestock movement forms
Product	This is a unique identifier or description	Yes	Import specific
code/description	assigned by the seller to each product type marketed or for sale.		commodity movement forms
Recipient Business Number	This is a unique registration number, used to identify businesses.	Yes	Import feed and water record, Import Receipt of purchase/Tax Invoice
Seller/Supplier Business Number	This is a unique registration number, used to identify businesses.	Yes	Import feed and water record, Import Receipt of purchase/Tax Invoice
To property identifier	The identification of the property (may be a PIC) from/to where the livestock or product were consigned.	Yes	Import specific commodity movement forms, Import specific livestock movement forms
Transport registration number	The registration number of the vehicle in which the animals or product were transported.	Yes	Import specific livestock movement forms
Treatment date	The date on which a treatment or product was applied to a unit e.g., paddock, animal, fodder etc.	Yes	Import feed and water record

5.2.7.1.3 Physical Outputs including Critical Tracking Events (CTEs)

Physical outputs for the transportation of cattle are limited to the cattle themselves.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with the outputs of the import livestock transport system include the movement of: * Cattle

off the property, premises, or supply chain sector.

Table 180. Physical outputs and associated Critical Tracking Event related documents for a beef import livestock transport system.

Cattle	These are bovine livestock and	Commercial supply contract, Import feed and water	
	may include any type of cattle	record, Import specific livestock movement forms,	
	e.g., cull cattle, calves etc.	Import Receipt of purchase/Tax Invoice	

5.2.7.1.4 Information Outputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). Information outputs related to livestock transport include that pertaining to the livestock themselves such as the individual animal identifier and any information to be passed on from feed and water records, as well as all other documents critical to the traceability of livestock movements.

Table 181. Information outputs, Key Data Elements and Critical Tracking Event related documentation for a beef import livestock transport system.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Agreement date	This is the date on which an agreement between two parties was made.	Yes	Commercial supply contract	
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Import feed and water record, Import Receipt of purchase/Tax Invoice	
Contract number	This is a unique number allocated to the contract by the seller.	Yes	Commercial supply contract	
Date	This is the date of signing or of which a record entry or transaction was made.	Yes	Commercial supply contract, Import feed and water record, Import Receipt of purchase/Tax Invoice, Import specific livestock movement forms	
From property identifier	The identification of the property (may be a PIC) from/to where the livestock or product were consigned.	Yes	Import specific livestock movement forms	
Livestock Identifier	The importer of exported livestock must demonstrate that these livestock remain traceable throughout the supply chain up to the point of slaughter. Livestock must be effectively identified, and all movements recorded to allow traceability back to the property of birth in the exporting country.	Yes	Import specific livestock movement forms	
Livestock movement form serial number	A unique certificate number issued for traceability purposes.	Yes	Import specific livestock movement forms	
Movement date	The date on which livestock or other products (e.g., feed or meat products) were transported between PICs/establishments.	Yes	Commercial supply contract, Import	

			specific livestock movement forms
Recipient Business Number	This is a unique registration number, used to identify businesses.	Yes	Import feed and water record, Import Receipt of purchase/Tax Invoice
Seller/Supplier Business Number	This is a unique registration number, used to identify businesses.	Yes	Import feed and water record, Import Receipt of purchase/Tax Invoice
To property identifier	The identification of the property (may be a PIC) from/to where the livestock or product were consigned.	Yes	Import specific livestock movement forms
Transport registration number	The registration number of the vehicle in which the animals or product were transported.	Yes	Import specific livestock movement forms
Treatment date	The date on which a treatment or product was applied to a unit e.g., paddock, animal, fodder etc.	Yes	Import feed and water record

5.2.7.1.5 Regulatory and Industry Programs

* Importing Country Transport Regulatory Body

* Other data sources

5.2.7.1.6 Supply Chain Node Traceability

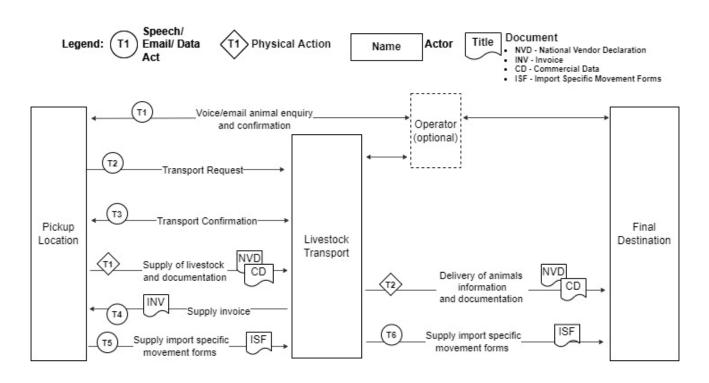
The National Livestock Identification System (NLIS) is the Australian livestock traceability program which is administered by Integrity Systems Company (ISC). Where stipulated by State legislation and certain export markets, the NLIS system requires all animals bought, sold, and moved along the supply chain to be tagged with an accredited NLIS ID tag. Each tag has an NLIS tag number or Radio Frequency Identifier (RFID) for the traceability of the animal throughout its lifetime. Every property which holds livestock must have a Property Identification Code (PIC) to which the livestock are assigned in the NLIS Database. Each time livestock are transferred between PICs within Australia they must be accompanied by a livestock movement declaration, such as the National Vendor Declaration (NVD) form. This document typically outlines the transporter details, consignment details, compliance with intended market specifications, withholding periods, and the details of the new property PIC. All livestock movements between PICs require an NLIS movement update to be made by either or both the consigner and receiver. Where NLIS ID tags are lost livestock must be issued with a new post-breeder tag if not on the PIC of birth and this reconciled in the NLIS Database. For animals loaded for live export, it is the exporters responsibility to ensure that all livestock are transferred from the port PIC to EEEEEEEE (8Es) which signifies that livestock have been exported. The importer of exported livestock must demonstrate that these livestock remain traceable throughout the supply chain up to the point of slaughter. Livestock must be effectively identified, and all movements recorded to allow traceability back to the property of birth in the exporting country i.e., Australia.

5.2.7.1.7 Data flow diagrams

Table 182. Data flow diagrams for the inputs and outputs of the beef import livestock transport

Direction	Description
Input	Import Livestock Transport

5.2.7.1.7.1 Import Livestock Transport



Livestock Transport

Figure 200. Data or information flows from import livestock transport systems in the beef supply chain.

5.2.7.2 Import refrigerated transport

Refrigerated transport involves the movement (including loading and unloading) of meat and meat products from one premises to another under conditions which ensure that product integrity and wholesomeness are maintained. Ensuring that adequate hygiene and temperature controls are complied with is integral to successful refrigerated transport. Product may be in carcase, cartoned or palletised form and must be accompanied by Critical Tracking Event related documents such as delivery dockets and specific product movement documents.

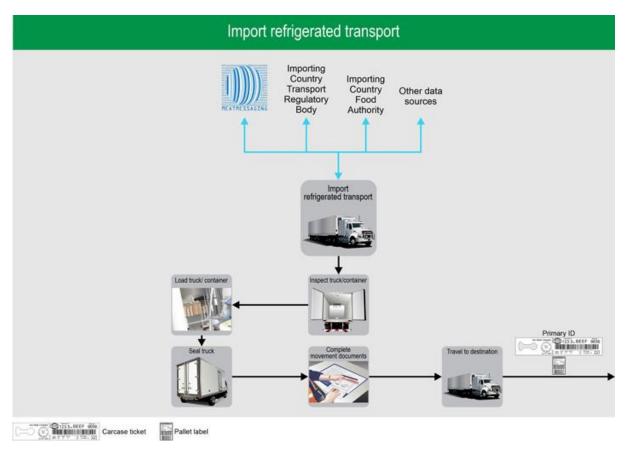


Figure 201. Inputs and outputs of the beef supply chain import refrigerated transport sector.

5.2.7.2.1 Physical Inputs including Critical Tracking Events (CTEs)

Meat and meat products may be transported between various establishments such as import inspection facilities, meat processors, value adding facilities and retailing premises. Therefore, the physical inputs to the refrigerated transport process may take various forms including product in carcase, carton or palletised form or product packed into shipping containers received from exporters.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with inputs to the import refrigerated transport system include the receival of:

- * Carcase
- * Carton
- * Pallet
- * Container System Unit (meat and meat products).

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Carcase	The body of a slaughtered animal after bleeding. Becomes a dressed carcase when hide,	Carcase Ticket, Delivery Docket/Manifest, Import specific meat/meat product movement forms, Import Receipt of purchase/Tax Invoice	

 Table 183. Physical inputs and associated Critical Tracking Event related documents for a beef import refrigerated transport system.

	head, feet and offal are removed.		
Carton	This is a case, crate, or barrel of product.	Carton label, Delivery Docket/Manifest, Import specific meat/meat product movement forms, Import Receipt of purchase/Tax Invoice	
Pallet	A logistic unit which includes a number of cartons or goods items packed together for transport or storage purposes.	Delivery Docket/Manifest, Import specific meat/meat product movement forms, Import Receipt of purchase/Tax Invoice, SSCC/Pallet label	
Container System Unit (meat and meat products)	A container designed for use as a unit of cargo handling equipment in the transport of goods by aircraft or ship.	Certificate of Analysis (COA), Delivery Docket/Manifest, Import Permit, Import specific meat/meat product movement forms, Imported Food Inspection Advice, Import Receipt of purchase/Tax Invoice	

5.2.7.2.2 Information Inputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). Transport of product between establishments is a Critical Tracking Event. Therefore, the KDEs here can largely be found on transportation documentation such as the Bill of lading/Air Waybill, Meat Transfer Certificate (MTC) or import specific meat/meat product movement forms, Export Health Certificate and Certificate of Analysis. Other documentation such as Carcase Tickets or carton/pallet labels will also contain KDEs.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Analysis Date	This is the date on which a product sample was analysed.	Yes	Certificate of Analysis (COA), Imported Food Inspection Advice	
Batch number	This is a unique number which identifies products sharing certain production characteristics and is used for traceability purposes.	Yes	Carcase Ticket	
Bill of lading/Air Waybill document number	A unique document number issued for traceability purposes.	Yes	Certificate of Analysis (COA)	
Body number	This is a number assigned to each carcase by the processor for identification purposes.	Yes	Carcase Ticket	
Certificate of Analysis number	A unique certificate number issued for traceability purposes.	Yes	Certificate of Analysis (COA), Imported Food Inspection Advice	
COA test lot identifier	This is a unique identifier allocated to all cartons, pallets, and shipping containers for which an analysis sample represents.	Yes	Certificate of Analysis (COA), Imported Food Inspection Advice	

Table 184. Information inputs, Key Data Elements and Critical Tracking Event related documentation for a beef import refrigerated transport system.

Company/product code	This is an in-house code for the	Yes	Carton label,	
code	identification of the product in the unit.		Certificate of Analysis (COA), Import Receipt of purchase/Tax	
			Invoice, Imported Food Inspection	
			Advice, SSCC/Pallet label	_
Consignment Serial Shipping Container Code (SSCC)	Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., shipment/message that is assigned by the establishment constructing the unit. The SSCC remains the same for the life of the logistic unit.	Yes	Import specific meat/meat product movement forms, Imported Food Inspection Advice, SSCC/Pallet label	For more information visit the GS1 website.
Contract number	This is a unique number allocated to the contract by the seller.	Yes	Delivery Docket/Manifest	
Count of Trade	Usually encoded in the GS1 barcode, this is	Yes	Delivery	For more
Items	the number of trade items e.g., cartons in		Docket/Manifest,	information visit the GS1
	the logistic unit.		Imported Food	website.
			Inspection Advice,	
			SSCC/Pallet label	
Date	This is the date of signing or of which a	Yes	Certificate of	
	record entry or transaction was made.		Analysis (COA),	
			Delivery	
			Docket/Manifest,	
			Import Receipt of	
			purchase/Tax	
			Invoice, Import	
			specific meat/meat	
			product movement	
Dolivory	This is a unique number allocated to the	Vac	forms Dolivory	
Delivery Docket/Manifest	This is a unique number allocated to the docket for identification purposes.	Yes	Delivery Docket/Manifest	
number	docket for identification purposes.		Docket/Maintest	
Food Control	This is a number assigned to the entry of a	Yes	Imported Food	
Certificate entry	shipment of goods imported by the same		Inspection Advice	
number	owner at the same time which can be			
	described by one import entry.			
From Establishment	A number issued by Federal and State	Yes	Carcase Ticket,	
number	Authorities to identify the originating site		Carton label,	
	from which meat or meat products were		Certificate of	
	distributed to domestic or export markets.		Analysis (COA),	
	For transfer certificates, the Establishment		Delivery	
	numbers for both the dispatching and		Docket/Manifest,	
	receiving establishments are recorded.	Vac	SSCC/Pallet label	
From property identifier	The identification of the property (may be	Yes	Import specific	
luentiner	a PIC) from/to where the livestock or		meat/meat product movement forms	
Global Trade Item	product were consigned.	Vac		For more
	Encoded in the GS1 barcode, the GTIN is a	Yes	Carcase Ticket, Carton label,	information
Number (GTIN)	globally unique 14-digit number used to		SSCC/Pallet label	visit the GS1
	identify trade items, products, or services.		SSCC/Pallet label	website.

GTIN of Contained Trade Items	Encoded in the GS1 barcode, the GTIN of the contained trade items is a globally unique 14-digit number used to identify trade items, products, or services in the logistic unit.	Yes	SSCC/Pallet label	
Import Permit Number	A unique permit number is allocated for the import consignment following submission of correct and validated documentation approved by the importing country.	Yes	Import Permit	
Imported Food Inspection Advice certificate number	A unique certificate number issued for traceability purposes.	Yes	Imported Food Inspection Advice	
Lot number	A lot is a number assigned by the processor to each group of cattle consigned to slaughter and is usually vendor specific.	Yes	Carcase Ticket	
Meat/meat product movement form number	A unique certificate number issued for traceability purposes.	Yes	Import specific meat/meat product movement forms	
Movement date	The date on which livestock or other products (e.g., feed or meat products) were transported between PICs/establishments.	Yes	Certificate of Analysis (COA), Delivery Docket/Manifest, Import specific meat/meat product movement forms	
Net Weight (Kilograms)	Usually encoded in the GS1 barcode, the Net Weight is a variable measure of the trade item e.g., carton, pallet or shipment recorded in kilograms.	Yes	Carcase Ticket, Carton label, SSCC/Pallet label	For more information visit the GS1 website.
Official mark	Any stamp, seal, label, or mark that is declared by the regulations to be an official mark. An official mark signifies that the product has been inspected by and approved as safe for human consumption by an Authorised Officer.	Yes	Carcase Ticket, Carton label, SSCC/Pallet label	
Order date	This is the date on which the purchase order or contract was raised by the buyer.	Yes	Delivery Docket/Manifest	
Packaging Date	Encoded in the GS1 barcode, the Packaging Date is the date on which the item was packaged and is recorded in the format year, month, day (YYMMDD).	Yes	Carton label, Certificate of Analysis (COA), SSCC/Pallet label	For more information visit the GS1 website.
Packaging Date Range	This includes the oldest and newest packaging dates for the logistic unit.	Yes	SSCC/Pallet label	For more information visit the GS1 website.
Pallet Serial Shipping Container Code (SSCC)	Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., pallet that is assigned by the establishment constructing the unit. The SSCC remains the same for the life of the logistic unit.	Yes	Import specific meat/meat product movement forms, SSCC/Pallet label	For more information visit the GS1 website.

Production Date (YYMMDD)	Encoded in the GS1 barcode, this is the 'kill' or slaughter' date of the product and is recorded in the format year, month, day (YYMMDD).	Yes	Carcase Ticket, Certificate of Analysis (COA), Import specific meat/meat product movement forms	For more information visit the GS1 website.
Recipient Business Number	This is a unique registration number, used to identify businesses.	Yes	Import Receipt of purchase/Tax Invoice	
Seller/Supplier Business Number	This is a unique registration number, used to identify businesses.	Yes	Import Receipt of purchase/Tax Invoice	
Serial Number	Encoded in the GS1 barcode, this is a code, numeric or alphanumeric, assigned to an individual instance of an item for its lifetime.	Yes	Carcase Ticket, Carton label	
Shipping Mark	Also known as a port mark, this is a code comprising of three letters representing the foreign establishment number and the last nine digits of the consignment SSCC.	Yes	Certificate of Analysis (COA), Delivery Docket/Manifest, SSCC/Pallet label	
To property identifier	The identification of the property (may be a PIC) from/to where the livestock or product were consigned.	Yes	Import specific meat/meat product movement forms	
Trade description	This is a collective set of words that says what the product is and may include information such as species, net weight of product, name and address of establishments, category ciphers, market endorsements, MSA eating quality etc.	Yes	Carcase Ticket, Carton label, Delivery Docket/Manifest, SSCC/Pallet label	
Transport registration number	The registration number of the vehicle in which the animals or product were transported. For shipments of product this will be a shipping container number.	Yes	Delivery Docket/Manifest, Import specific meat/meat product movement forms	

5.2.7.2.3 Physical Outputs including Critical Tracking Events (CTEs)

As the refrigerated transportation process involves the movement of product between establishments, the physical outputs are the same as for the physical inputs. This may include product in carcase, carton or palletised form or product packed into shipping containers received from exporters.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with the outputs of the import refrigerated transport system include the movement of:

- * Carcase
- * Carton
- * Pallet
- * Container System Unit (meat and meat products)

off the property, premises, or supply chain sector.

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Carcase	The body of a slaughtered animal after bleeding. Becomes a dressed carcase when hide, head, feet and offal are removed.	Carcase Ticket, Delivery Docket/Manifest, Import specific meat/meat product movement forms, Import Receipt of purchase/Tax Invoice	
Carton	This is a case, crate, or barrel of product.	Carton label, Delivery Docket/Manifest, Import specific meat/meat product movement forms, Import Receipt of purchase/Tax Invoice	
Pallet	A logistic unit which includes a number of cartons or goods items packed together for transport or storage purposes.	Delivery Docket/Manifest, Import specific meat/meat product movement forms, Import Receipt of purchase/Tax Invoice, SSCC/Pallet label	
Container System Unit (meat and meat products)	A container designed for use as a unit of cargo handling equipment in the transport of goods by aircraft or ship.	Certificate of Analysis (COA), Delivery Docket/Manifest, Import Permit, Import specific meat/meat product movement forms, Imported Food Inspection Advice, Import Receipt of purchase/Tax Invoice	

Table 185. Physical outputs and associated Critical Tracking Event related documents for a beef import refrigerated transport system.

5.2.7.2.4 Information Outputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). Transport of product between establishments is a Critical Tracking Event. Therefore, the KDEs here can largely be found on transportation documentation such as the Bill of lading/Air Waybill, Meat Transfer Certificate (MTC) or import specific meat/meat product movement forms, Export Health Certificate and Certificate of Analysis. Other documentation such as Carcase Tickets or carton/pallet labels will also contain KDEs.

Table 186. Information outputs, Key Data Elements and Critical Tracking Event related documentation for a beef import refrigerated transport system.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Analysis Date	This is the date on which a product sample was analysed.	Yes	Certificate of Analysis (COA), Imported Food Inspection Advice	
Batch number	This is a unique number which identifies products sharing certain production characteristics and is used for traceability purposes.	Yes	Carcase Ticket	
Bill of lading/Air Waybill document number	A unique document number issued for traceability purposes.	Yes	Certificate of Analysis (COA)	
Body number	This is a number assigned to each carcase by the processor for identification purposes.	Yes	Carcase Ticket	

Certificate of	A unique certificate number issued for	Yes	Certificate of	
Analysis number	traceability purposes.	res	Analysis (COA),	
Analysis number	traceability purposes.			
			Imported Food	
			Inspection Advice	
COA test lot	This is a unique identifier allocated to all	Yes	Certificate of	
identifier	cartons, pallets, and shipping containers		Analysis (COA),	
	for which an analysis sample represents.		Imported Food	
			Inspection Advice	
Company/product	This is an in-house code for the	Yes	Carton label,	
code	identification of the product in the unit.		Certificate of	
			Analysis (COA),	
			Import Receipt of	
			purchase/Tax	
			Invoice, Imported	
			Food Inspection	
			Advice, SSCC/Pallet	
			label	
Consignment Coriol	Encoded in the CC1 beyonds this is a	Vac		For more
Consignment Serial	Encoded in the GS1 barcode, this is a	Yes	Import specific	information
Shipping Container	unique number which identifies the		meat/meat product	visit the GS1
Code (SSCC)	individual logistic unit i.e.,		movement forms,	website.
	shipment/message that is assigned by the		Imported Food	
	establishment constructing the unit. The		Inspection Advice,	
	SSCC remains the same for the life of the		SSCC/Pallet label	
	logistic unit.			
Contract number	This is a unique number allocated to the	Yes	Delivery	
	contract by the seller.		Docket/Manifest	
Count of Trade	Usually encoded in the GS1 barcode, this is	Yes	Delivery	For more
Items	the number of trade items e.g., cartons in		Docket/Manifest,	information
	the logistic unit.		Imported Food	visit the GS1 website.
			Inspection Advice,	website.
			SSCC/Pallet label	
Date	This is the date of signing or of which a	Yes	Certificate of	
Date		163	Analysis (COA),	
	record entry or transaction was made.			
			Delivery	
			Docket/Manifest,	
			Import Receipt of	
			purchase/Tax	
			Invoice, Import	
			specific meat/meat	
			product movement	
			forms	
Delivery	This is a unique number allocated to the	Yes	Delivery	
Docket/Manifest	docket for identification purposes.		Docket/Manifest	
number				
Food Control	This is a number assigned to the entry of a	Yes	Imported Food	
Certificate entry	shipment of goods imported by the same		Inspection Advice	
number	owner at the same time which can be			
	described by one import entry.			
From Establishment	A number issued by Federal and State	Yes	Carcase Ticket,	
number	Authorities to identify the originating site		Carton label,	
number	from which meat or meat products were		Certificate of	
	-			
	distributed to domestic or export markets.		Analysis (COA),	
	For transfer certificates, the Establishment		Delivery	

	numbers for both the dispatching and		Docket/Manifest,	
	receiving establishments are recorded.		SSCC/Pallet label	
From property	The identification of the property (may be	Yes	· ·	
From property identifier	a PIC) from/to where the livestock or	res	Import specific meat/meat product	
luentiner				
Clabel Trede Iteres	product were consigned.	N	movement forms	For more
Global Trade Item	Encoded in the GS1 barcode, the GTIN is a	Yes	Carcase Ticket,	information
Number (GTIN)	globally unique 14-digit number used to		Carton label,	visit the GS1
	identify trade items, products, or services.		SSCC/Pallet label	website.
GTIN of Contained	Encoded in the GS1 barcode, the GTIN of	Yes	SSCC/Pallet label	For more information
Trade Items	the contained trade items is a globally			visit the GS1
	unique 14-digit number used to identify			website.
	trade items, products, or services in the			
	logistic unit.			
Import Permit	A unique permit number is allocated for	Yes	Import Permit	
Number	the import consignment following			
	submission of correct and validated			
	documentation approved by the importing			
	country.			
Imported Food	A unique certificate number issued for	Yes	Imported Food	
Inspection Advice	traceability purposes.		Inspection Advice	
certificate number				
Lot number	A lot is a number assigned by the	Yes	Carcase Ticket	
	processor to each group of cattle			
	consigned to slaughter and is usually			
	vendor specific.			
Meat/meat product	A unique certificate number issued for	Yes	Import specific	
movement form	traceability purposes.		meat/meat product	
number			movement forms	
Movement date	The date on which livestock or other	Yes	Certificate of	
	products (e.g., feed or meat products)		Analysis (COA),	
	were transported between		Delivery	
	PICs/establishments.		Docket/Manifest,	
			Import specific	
			meat/meat product	
			movement forms	
Net Weight	Usually encoded in the GS1 barcode, the	Yes	Carcase Ticket,	For more
(Kilograms)	Net Weight is a variable measure of the		Carton label,	information
	trade item e.g., carton, pallet or shipment		SSCC/Pallet label	visit the GS1 website.
	recorded in kilograms.		,	website.
Official mark	Any stamp, seal, label, or mark that is	Yes	Carcase Ticket,	
	declared by the regulations to be an		Carton label,	
	official mark. An official mark signifies that		SSCC/Pallet label	
	the product has been inspected by and			
	approved as safe for human consumption			
	by an Authorised Officer.			
Order date	This is the date on which the purchase	Yes	Delivery	
	order or contract was raised by the buyer.		Docket/Manifest	
Packaging Date	Encoded in the GS1 barcode, the	Yes	Carton label,	For more
. actuante Dute	Packaging Date is the date on which the	105	Certificate of	information
	item was packaged and is recorded in the		Analysis (COA),	visit the GS1
	format year, month, day (YYMMDD).		SSCC/Pallet label	website.
Packaging Date	This includes the oldest and newest	Yes	SSCC/Pallet label	For more
	packaging dates for the logistic unit.	162	JJCC/ Fallet IdDel	information
Range	packaging uates for the logistic unit.		1	

				visit the GS1 website.
Pallet Serial Shipping Container Code (SSCC)	Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., pallet that is assigned by the establishment constructing the unit. The SSCC remains the same for the life of the logistic unit.	Yes	Import specific meat/meat product movement forms, SSCC/Pallet label	For more information visit the GS1 website.
Production Date (YYMMDD)	Encoded in the GS1 barcode, this is the 'kill' or slaughter' date of the product and is recorded in the format year, month, day (YYMMDD).	Yes	Carcase Ticket, Certificate of Analysis (COA), Import specific meat/meat product movement forms	For more information visit the GS1 website.
Recipient Business Number	This is a unique registration number, used to identify businesses.	Yes	Import Receipt of purchase/Tax Invoice	
Seller/Supplier Business Number	This is a unique registration number, used to identify businesses.	Yes	Import Receipt of purchase/Tax Invoice	
Serial Number	Encoded in the GS1 barcode, this is a code, numeric or alphanumeric, assigned to an individual instance of an item for its lifetime.	Yes	Carcase Ticket, Carton label	For more information visit the GS1 website.
Shipping Mark	Also known as a port mark, this is a code comprising of three letters representing the foreign establishment number and the last nine digits of the consignment SSCC.	Yes	Certificate of Analysis (COA), Delivery Docket/Manifest, SSCC/Pallet label	
To property identifier	The identification of the property (may be a PIC) from/to where the livestock or product were consigned.	Yes	Import specific meat/meat product movement forms	
Trade description	This is a collective set of words that says what the product is and may include information such as species, net weight of product, name and address of establishments, category ciphers, market endorsements, MSA eating quality etc.	Yes	Carcase Ticket, Carton label, Delivery Docket/Manifest, SSCC/Pallet label	
Transport registration number	The registration number of the vehicle in which the animals or product were transported. For shipments of product this will be a shipping container number.	Yes	Delivery Docket/Manifest, Import specific meat/meat product movement forms	

5.2.7.2.5 Regulatory and Industry Programs

- * Importing Country Transport Regulatory Body
- * Importing Country Food Authority
- * Meat Messaging
- * Other data sources

5.2.7.2.6 Supply Chain Node Traceability

The traceability of imported product undergoing refrigerated transport back to the live animal and property of origin is dependent on the form in which the product is being transported.

Traceability of whole carcases back to the live animal is possible and can be done by the processing establishment where the animal was slaughtered as importers of livestock are required to demonstrate that animals remain traceable throughout the supply chain up to the point of slaughter. Here, carcases are issued a carcase ticket which correlates to the live animal identifier and contains key information, including GS1 meat industry barcode, body number, processing establishment number and production date or 'kill date'. Thus, there is the potential to trace whole carcases undergoing refrigerated transport back to the individual live animal and property of origin.

For cartoned and palletised product, each identified by unique serialised carton or product labels respectively, including a GS1 meat industry barcode, traceability is limited to the carcases that have entered the boning room for the production run of cartons that were created. For example, 200 carcases (400 sides) individually identified with unique carcase tickets enter the boning room for a specific boning run. These carcase tickets are linked to the specific boning run. From these carcases, 3 200 cartons of primal cuts and 1 000 cartons of trim and other highly mixed products are created. While all cartons are identified with unique serialised carton labels linked to the boning run (and may be packaged into pallets containing unique serialised pallet labels including a GS1 SSCC barcode), it is not readily possible to identify which carcases are in which cartons as the cartons will contain meat products from different carcases. If the carcases were sourced from several different properties, the resulting carton can only be traced to a number of possible carcases and source properties. In logistical systems such as transport and cold stores, cartons are typically processed by pallets with only the pallet label being scanned. Therefore, traceability through logistics is often at the pallet level.

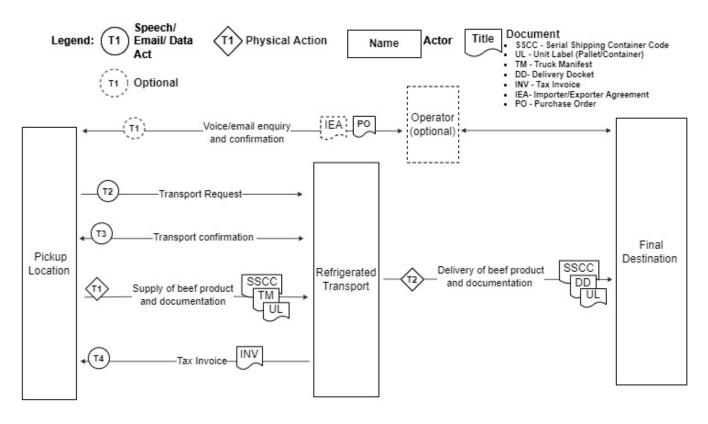
Traceability requirements post slaughter differ depending on the importing country. Typically, product transferred between establishments will be accompanied by import specific meat/meat product movement forms which details the serialised logistic unit identifiers such as the Serial Shipping Container Code (SSCC). This allows traceability of the unit and its subunits back to either the live animal and property of origin (for carcases) or the boning room production run (for cartons and pallets).

5.2.7.2.7 Data flow diagrams

	C		C
Table 187. Data flow diagrams	for the inputs and	outputs of beet import	refriaerated transport

Direction	Description
Input/Output	Import Refrigerated Transport

5.2.7.2.7.1 Import Refrigerated Transport

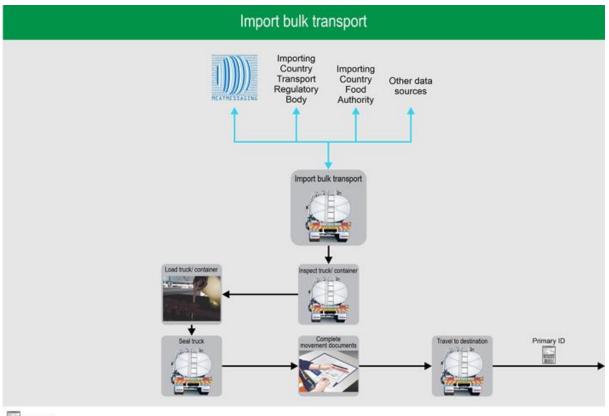


Import Refrigerated Transport

Figure 202. Data or information flows of import refrigerated transport systems in the beef supply chain

5.2.7.3 Import bulk transport

Bulk transport involves the movement (including loading and unloading) of by-products (from render) or hides from one premises to another. By-products and hides are typically manufactured into leather products, feed, fertilizer, and pharmaceutical products for commercial distribution. All bulk transport movements must be accompanied by Critical Tracking Event related documents such as delivery dockets and specific product movement documents.



Pallet label

Figure 203. Inputs and outputs of the beef supply chain import bulk transport sector.

5.2.7.3.1 Physical Inputs including Critical Tracking Events (CTEs)

Physical inputs into the import bulk transport system may include animal by products from rendering or hide processing facilities packaged into container system units. Documentation required to accompany the importation and transportation of such product includes the Bill of lading/Air Waybill, Certificate of Analysis (COA), Delivery docket and import specific meat/meat product movement forms among others.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with inputs to the import bulk transport system include the receival of:

* Container System Unit (render and hide product).

Event related to the inputs	Description of the inputs	Critical Tracking Event (CTE) related documents (including electronic)	More details
Container System Unit (render and hide product)	A container designed for use as a unit of cargo handling equipment in the transport of goods by aircraft or ship.	Bill of lading/Air Waybill, Certificate of Analysis (COA), Delivery Docket/Manifest, Import Permit Import specific meat/meat product movement forms, Import clearance documentation, Import Receipt of purchase/Tax Invoice	

Table 188. Physical inputs and associated Critical Tracking Event related documents for a beef import bulk transport system.

5.2.7.3.2 Information Inputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). The transport of product between establishments is a Critical Tracking Event. Therefore, the KDEs here can largely be found on transportation documentation such as the Bill of lading/Air Waybill, import specific meat/meat product movement forms, Import clearance documentation and Certificate of Analysis. Other documentation such as Receipts of purchase/Tax Invoices will also contain KDEs.

Table 189. Information inputs, Key Data Elements and Critical Tracking Event related documentation for a beef import bulk transport system.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Analysis Date	This is the date on which a product sample was analysed.	Yes	Certificate of Analysis (COA)	
Bill of lading/Air Waybill document number	A unique document number issued for traceability purposes.	Yes	Bill of lading/Air Waybill, Certificate of Analysis (COA)	
Certificate of Analysis number	A unique certificate number issued for traceability purposes.	Yes	Certificate of Analysis (COA)	
COA test lot identifier	This is a unique identifier allocated to all cartons, pallets, and shipping containers for which an analysis sample represents.	Yes	Certificate of Analysis (COA)	
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Bill of lading/Air Waybill, Certificate of Analysis (COA), Import Receipt of purchase/Tax Invoice	
Consignment Serial Shipping Container Code (SSCC)	Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., shipment/message that is assigned by the establishment constructing the unit. The SSCC remains the same for the life of the logistic unit.	Yes	Bill of lading/Air Waybill, Import clearance documentation	For more information visit the GS1 website.
Contract number	This is a unique number allocated to the contract by the seller.	Yes	Delivery Docket/Manifest	
Count of Trade Items	Usually encoded in the GS1 barcode, this is the number of trade items e.g., cartons in the logistic unit.	Yes	Bill of lading/Air Waybill, Delivery Docket/Manifest	For more information visit the GS1 website.
Date	This is the date of signing or of which a record entry or transaction was made.	Yes	Bill of lading/Air Waybill, Certificate of Analysis (COA), Delivery Docket/Manifest, Import clearance documentation, Import Receipt of purchase/Tax Invoice	

Delivery Docket/Manifest number	This is a unique number allocated to the docket for identification purposes.	Yes	Delivery Docket/Manifest	
From Establishment number	A number issued by Federal and State Authorities to identify the originating site from which meat or meat products were distributed to domestic or export markets. For transfer certificates, the Establishment numbers for both the dispatching and receiving establishments are recorded.	Yes	Certificate of Analysis (COA), Delivery Docket/Manifest, Import clearance documentation	
Import Permit Number	A unique permit number is allocated for the import consignment following submission of correct and validated documentation approved by the importing country.	Yes	Import Permit	
Movement date	The date on which livestock or other products (e.g., feed or meat products) were transported between PICs/establishments.	Yes	Bill of lading/Air Waybill, Certificate of Analysis (COA), Delivery Docket/Manifest, Import clearance documentation	
Net Weight (Kilograms)	Usually encoded in the GS1 barcode, the Net Weight is a variable measure of the trade item e.g., carton, pallet or shipment recorded in kilograms.	Yes	Bill of lading/Air Waybill	For more information visit the GS1 website.
NLIS Tag Number/RFID	All animals transported between PICs must have a permanent National Livestock Identification System tag attached. This tag has a unique animal identification number.	Yes	Bill of lading/Air Waybill	For more information visit the Integrity systems website.
Order date	This is the date on which the purchase order or contract was raised by the buyer.	Yes	Delivery Docket/Manifest	
Packaging Date	Encoded in the GS1 barcode, the Packaging Date is the date on which the item was packaged and is recorded in the format year, month, day (YYMMDD).	Yes	Certificate of Analysis (COA)	For more information visit the GS1 website.
Packaging Date Range	This includes the oldest and newest packaging dates for the logistic unit.	Yes	Import clearance documentation	For more information visit the GS1 website.
Pallet Serial Shipping Container Code (SSCC)	Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., pallet that is assigned by the establishment constructing the unit. The SSCC remains the same for the life of the logistic unit.	Yes	Import clearance documentation	For more information visit the GS1 website.
Production Date (YYMMDD)	Encoded in the GS1 barcode, this is the 'kill' or slaughter' date of the product and is recorded in the format year, month, day (YYMMDD).	Yes	Certificate of Analysis (COA)	For more information visit the GS1 website.

Recipient Business	This is a unique registration number, used	Yes	Import Receipt of	
Number	to identify businesses.		purchase/Tax Invoice	
Seal Serial Number	This is a unique serial number printed on	Yes	Bill of lading/Air	For more information
	any tamper-evident seal issued by the		Waybill, Import	visit the GS1
	Department.		clearance	website.
			documentation	
Seller/Supplier	This is a unique registration number, used	Yes	Import Receipt of	
Business Number	to identify businesses.		purchase/Tax Invoice	
Shipping Mark	Also known as a port mark, this is a code	Yes	Bill of lading/Air	
	comprising of three letters representing		Waybill, Certificate of	
	the foreign establishment number and		Analysis (COA),	
	the last nine digits of the consignment		Delivery	
	SSCC.		Docket/Manifest	
To Establishment	A number issued by Federal and State	Yes	Import clearance	
number	Authorities to identify the originating site		documentation	
	from which meat or meat products were			
	distributed to domestic or export			
	markets. For transfer certificates, the			
	Establishment numbers for both the			
	dispatching and receiving establishments			
	are recorded.			
Trade description	This is a collective set of words that says	Yes	Delivery	
	what the product is and may include		Docket/Manifest,	
	information such as species, net weight		Import clearance	
	of product, name and address of		documentation	
	establishments, category ciphers, market			
	endorsements, MSA eating quality etc.			
Transport	The registration number of the vehicle in	Yes	Bill of lading/Air	
registration number	which the animals or product were		Waybill, Delivery	
	transported. For shipments of product		Docket/Manifest,	
	this will be a shipping container number.		Import clearance	
			documentation	

5.2.7.3.3 Physical Outputs including Critical Tracking Events (CTEs)

Physical outputs of the import bulk transport system is product (animal by products from rendering or hide processing facilities) which has been received in shipping containers from exporters. Documentation required to accompany the importation and transportation of such product includes the Bill of lading/Air Waybill, Certificate of Analysis (COA), Delivery docket and import specific meat/meat product movement forms among others.

Critical Tracking Events (CTEs) are defined as those events which include the growing, receiving, transforming, creating, and shipping of food products. Such events are critical to the traceability of product throughout the supply chain.

The CTEs associated with the outputs of the import bulk transport system include the movement of:

* Container System Unit (render and hide product)

off the property, premises, or supply chain sector.

Table 190. Physical outputs and associated Critical Tracking Event related documents for a beef import bulk transport system.

Event De related to the inputs	•	Critical Tracking Event (CTE) related documents (including electronic)	More details
--------------------------------------	---	---	-----------------

Container	A container designed for	Bill of lading/Air Waybill, Certificate of Analysis (COA),	
System Unit	use as a unit of cargo	Delivery Docket/Manifest, Import Permit, Import	
(render and	handling equipment in the	specific meat/meat product movement forms, Import	
hide	transport of goods by	clearance documentation, Import Receipt of	
product)	aircraft or ship.	purchase/Tax Invoice	

5.2.7.3.4 Information Outputs including Key Data Elements (KDEs)

Key Data Elements (KDEs) are defined as those elements which are key in identifying and tracing the Critical Tracking Event (CTE). The transport of product between establishments is a Critical Tracking Event. Therefore, the KDEs here can largely be found on transportation documentation such as the Bill of lading/Air Waybill, import specific meat/meat product movement forms, Import clearance documentation and Certificate of Analysis. Other documentation such as Receipts of purchase/Tax Invoices will also contain KDEs.

Table 191. Information outputs, Key Data Elements and Critical Tracking Event related documentation for a beef import bulk transport system.

Attributes (including KDEs)	Description of the Attributes (including KDEs)	ls a KDE	Critical Tracking Event (CTE) related documents (including electronic)	More details
Analysis Date	This is the date on which a product sample was analysed.	Yes	Certificate of Analysis (COA)	
Bill of lading/Air Waybill document number	A unique document number issued for traceability purposes.	Yes	Bill of lading/Air Waybill, Certificate of Analysis (COA)	
Certificate of Analysis number	A unique certificate number issued for traceability purposes.	Yes	Certificate of Analysis (COA)	
COA test lot identifier	This is a unique identifier allocated to all cartons, pallets, and shipping containers for which an analysis sample represents.	Yes	Certificate of Analysis (COA)	
Company/product code	This is an in-house code for the identification of the product in the unit.	Yes	Bill of lading/Air Waybill, Certificate of Analysis (COA), Import Receipt of purchase/Tax Invoice	
Consignment Serial Shipping Container Code (SSCC)	Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., shipment/message that is assigned by the establishment constructing the unit. The SSCC remains the same for the life of the logistic unit.	Yes	Bill of lading/Air Waybill, Import clearance documentation	
Contract number	This is a unique number allocated to the contract by the seller.	Yes	Delivery Docket/Manifest	
Count of Trade Items	Usually encoded in the GS1 barcode, this is the number of trade items e.g., cartons in the logistic unit.	Yes	Bill of lading/Air Waybill, Delivery Docket/Manifest	
Date	This is the date of signing or of which a record entry or transaction was made.	Yes	Bill of lading/Air Waybill, Certificate of Analysis (COA), Delivery Docket/Manifest,	

			Import clearance documentation,	
			Import Receipt of purchase/Tax Invoice	
Delivery Docket/Manifest number	This is a unique number allocated to the docket for identification purposes.	Yes	Delivery Docket/Manifest	
From Establishment number	A number issued by Federal and State Authorities to identify the originating site from which meat or meat products were distributed to domestic or export markets. For transfer certificates, the Establishment numbers for both the dispatching and receiving establishments are recorded.	Yes	Certificate of Analysis (COA), Delivery Docket/Manifest, Import clearance documentation	
Import Permit Number	A unique permit number is allocated for the import consignment following submission of correct and validated documentation approved by the importing country.	Yes	Import Permit	
Movement date	The date on which livestock or other products (e.g., feed or meat products) were transported between PICs/establishments.	Yes	Bill of lading/Air Waybill, Certificate of Analysis (COA), Delivery Docket/Manifest, Import clearance documentation	
Net Weight (Kilograms)	Usually encoded in the GS1 barcode, the Net Weight is a variable measure of the trade item e.g., carton, pallet or shipment recorded in kilograms.	Yes	Bill of lading/Air Waybill	For more information visit the GS1 website.
NLIS Tag Number/RFID	All animals transported between PICs must have a permanent National Livestock Identification System tag attached. This tag has a unique animal identification number.	Yes	Bill of lading/Air Waybill	For more information visit the Integrity systems website.
Order date	This is the date on which the purchase order or contract was raised by the buyer.	Yes	Delivery Docket/Manifest	
Packaging Date	Encoded in the GS1 barcode, the Packaging Date is the date on which the item was packaged and is recorded in the format year, month, day (YYMMDD).	Yes	Certificate of Analysis (COA)	For more information visit the GS1 website.
Packaging Date Range	This includes the oldest and newest packaging dates for the logistic unit.	Yes	Import clearance documentation	For more information visit the GS1 website.
Pallet Serial Shipping Container Code (SSCC)	Encoded in the GS1 barcode, this is a unique number which identifies the individual logistic unit i.e., pallet that is assigned by the establishment constructing the unit. The SSCC remains the same for the life of the logistic unit.	Yes	Import clearance documentation	For more information visit the GS1 website.

Production Date (YYMMDD)	Encoded in the GS1 barcode, this is the 'kill' or slaughter' date of the product and is recorded in the format year, month, day (YYMMDD).	Yes	Certificate of Analysis (COA)	
Recipient Business Number	This is a unique registration number, used to identify businesses.	Yes	Import Receipt of purchase/Tax Invoice	
Seal Serial Number	This is a unique serial number printed on any tamper-evident seal issued by the Department.	Yes	Bill of lading/Air Waybill, Import clearance documentation	For more information <u>visit the</u> <u>Australian</u> <u>Government</u> <u>Federal</u> <u>Register of</u> <u>Legislation.</u>
Seller/Supplier Business Number	This is a unique registration number, used to identify businesses.	Yes	Import Receipt of purchase/Tax Invoice	
Shipping Mark	Also known as a port mark, this is a code comprising of three letters representing the foreign establishment number and the last nine digits of the consignment SSCC.	Yes	Bill of lading/Air Waybill, Certificate of Analysis (COA), Delivery Docket/Manifest	
To Establishment number	A number issued by Federal and State Authorities to identify the originating site from which meat or meat products were distributed to domestic or export markets. For transfer certificates, the Establishment numbers for both the dispatching and receiving establishments are recorded.	Yes	Import clearance documentation	
Trade description	This is a collective set of words that says what the product is and may include information such as species, net weight of product, name and address of establishments, category ciphers, market endorsements, MSA eating quality etc.	Yes	Delivery Docket/Manifest, Import clearance documentation	
Transport registration number	The registration number of the vehicle in which the animals or product were transported. For shipments of product this will be a shipping container number.	Yes	Bill of lading/Air Waybill, Delivery Docket/Manifest, Import clearance documentation	

- 5.2.7.3.5 Regulatory and Industry Programs
- * Importing Country Transport Regulatory Body
- * Importing Country Food Authority
- * Other data sources
- * Meat Messaging

5.2.7.3.6 Supply Chain Node Traceability

The traceability of imported rendered and hide product, that is bulk transported, back to the live animal and property of origin is operationally impractical. This is because rendered and hide products are bulk processed and packaged from any given processing day or number of processing days. While this means that the production date or kill date of animals from which hides or rendered product is likely to be known, any batch of product being

packaged into store bags or pallets with unique serialised labels is only traceable to any number of cattle or source properties.

For example, hides or product for render which make up one batch come from a total of 6 plant kill day combinations. For each processing day 800 animals, sourced from 8 different properties are slaughtered and the unique serialised NLIS ID tag numbers or animal identifiers known for each animal as well as that of the corresponding carcase ticket. With render or hide products from these processing days being processed and packaged in one batch, the unique serialised identifiers of output products can be linked only to that batch and the processing dates from which product was obtained. This means that one batch is comprised of any of 4 800 source animals that were supplied by any of 48 source properties.

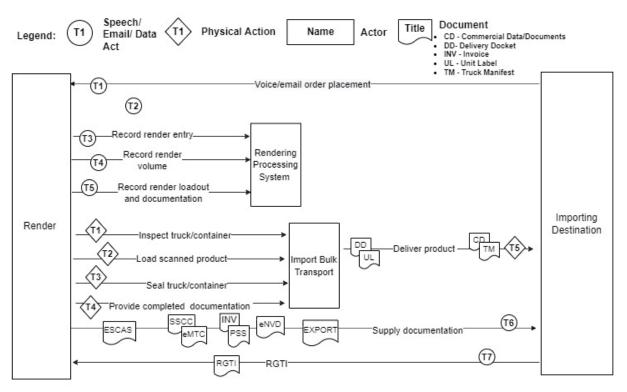
Traceability requirements post slaughter differ depending on the importing country. Typically, bulk transported product will be accompanied by import specific meat/meat product movement forms and a Meat Messaging Consignment Report. The Consignment Report is issued to the buyer of product and lists all the logistic unit and subunit unique serialised identifiers contained within the Container System Unit to be exported including the Consignment Serial Shipping Container Code (SSCC), Pallet Serial Shipping Container Code, and scanned and verified carton label serial identifiers. Additionally, the product movement forms detail the serialised logistic unit identifiers such as the Serial Shipping Container Code (SSCC). These documents allow traceability of the unit and its subunits back to any number of cattle or source properties.

5.2.7.3.7 Data flow diagrams

Direction	Description
Input	Import Bulk Transport

Table 192. Data flow diagrams for the inputs and outputs of a beef import bulk transport system

5.2.7.3.7.1 Import Bulk Transport



Render to Import Bulk Transport

Figure 204. Data or information from the import bulk transport system in the beef supply chain

6 Glossary

Term	Abbreviation	Description	Beef	Sheep	Dairy
National Vendor Declaration	NVD	A document issued by a vendor to certify the origin of the vendor and its livestock.	Х	X	X
Meat Standards Australia	MSA	A standards organisation that sets and defines criteria for assessing red meat quality.	Х	X	
National Vendor Declaration	eNVD	An electronic document issued by a vendor to certify the origin of the vendor and its livestock.	Х	X	Х
Recipient Generated Tax Invoice	RGTI	Tax invoice supplied by the vendor or supplier.	Х	х	х
Commercial Data	CD	Multiple documents provided e.g., Commercial supply contract, reporting analysis health certificate etc.	Х	X	X
Producer feedback	PF	Producer feedback provides insights on how well a carcase performed e.g., MSA grading	Х	X	Х
National Feedlot Accreditation Scheme	NFAS	Independently audited quality assurance program for the Australian lot feeding industry.	Х	X	
Slaughter feedback	SF	Providing feedback to producers or vendors on carcase performance.	Х	Х	Х
Slaughter details	SD	Information and data associated to slaughter.	Х	х	
Post-Sale Summary	PSS	A series of tasks that you perform after a customer purchases a product or service.	Х	X	X
Kill agenda	КА	An agenda of animals slaughtered on a production day at a processing establishment,	Х	X	
Carcase Ticket	СТ	A ticket or tag applied to a carcase usually on the slaughter floor and scanned at boning room entry, carcase load in or load out. Provides traceability of the carcase as it moves throughout the processing establishment.	X	X	
Production plan	РР	A production plan is a step-by-step plan implemented at the start of the production day to provide efficient processing of the production life cycle.	X	Х	
Pallet label	PL	It is a label applied to a pallet of production after palletisation and shrink wrapping. It is necessary to have correct labelling for logistics, traceability and distribution process.	X	X	x

Unit Label	UL	A label applied to an object or product to describe what it is.	х	Х	
Serial Shipping Container Code	SSCC	An 18-digit number used to identify product. SSC is encoded in the barcode and can also be encoded in an RFID tag.	х	Х	X
Tender Document	TD	A document outlining a formal statement of the tender participants offer to supply product.	Х	Х	
Picking instruction	PI	A process of picking items and product from the warehouse inventory.	х	Х	Х
Truck Manifest	ТМ	A truck manifest is a document outlining the pickup and drop off associated with the booking or order. It is assigned to a specific truck and assists traceability measures for product being loaded out or loaded in.	x	x	X
Stock on Hand	SOH	Stock on hand is the amount of product that a processing establishment or warehouse has available at a particular time.	х	Х	Х
Storage Detail	SD	Details on what and where product is located at a processing establishment, warehouse or cold store facility.	x	Х	X
Delivery Docket	DD	A delivery is a document accompanying product being delivered to a particular location.	Х	Х	Х
Invoice	INV	A receipt or proof of purchase or tax invoice.	Х	Х	Х
Global Trade Item	GTIN	The Global Trade Item Number is an identifier for trade items developed by the international organisation GS1.	Х	Х	Х
Export Permit	EXPORT	Issued by DAWE, it provides permission to conduct a specific export transaction.	Х	Х	Х
Purchase Order	PO	A contract between the buyer and a seller which specifies information relating to the goods, delivery and terms and conditions of purchase	х	Х	X
Production Order	PRO	An order issued within a company to produce a specific quantity of material within a certain timeframe.			Х
Importer/Exporter Agreement	IEA	A contract between the importing and exporting businesses which specifies the terms of trade.			Х
Export Health/Government Certificate	НС	A certificate issued by the Department containing details about the product being exported and confirming that certain importing country requirements have been met	x	Х	Х

Import Permit Transfer Declaration	IP TD	 to facilitate clearance of goods at import. Depending on requirements, the certificate will be signed by either a Veterinary or Authorised Officer. A document that confirms eligibility of goods for import and facilitates the importation of these goods by a country. A declaration statement made by the dispatching establishment regarding 			x
		the export eligibility of the goods being moved.			
Export Documents	ED	Covers all official export documents for transport and government requirements.			X
Logistics Management Records	LMR	Internal record keeping system, electronic or paper based.			Х
Processor Management Records	PMR	Internal record keeping system, electronic or paper based.			х
Exporter Supply Chain Assurance System	ESCAS	The Exporter Supply Chain Assurance System is an assurance system based on commercial arrangements with supply chain partners in importing countries to provide humane treatment and handling of livestock.	X	X	
Export Documentation System	EXDOC	EXDOC is the DAWEs electronic export documentation system with the purpose of managing export documentation for primary produce.	Х	X	X
Importing Country Government System	ICGS	A system used by Importing Country Government for inspection and verification of importing country requirements.	Х	X	x
Importing Country Food Authority	ICFA	Importing Country Food Authority implement certain requirements for commercially viable product. e.g., Import Supermarket	Х	X	X
Import Specific livestock movement forms	ISF	Import specific commodity movement forms and livestock movement forms. This includes the property (PIC) from/to where the livestock or product were consigned	X	X	

7 Reference List

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