



# ***Commercial and market paddock to plate traceability***

MINTRAC National Meat Industry Training Conference

March 2014

Presented by Des Bowler

# Traceability.....

**Operational Traceability** - What are the day to day activities in the global traded commodity markets for traceability.

**Impacts of Traceability** - What are the impacts along the supply chain. Bar coding, electronic messaging, import regulations?

**Emotive Consumerism** - What do consumers perceive paddock to plate traceability to mean?

**What are the costs and who pays** - How does the end user pay for traceability?

**Domestic Markets** - Do domestic distribution channels want and understand paddock to plate traceability?

**Export Markets** - What are the demands from importers and how are the regulatory import requirements met?

How many cartons? How many suppliers? All tracked by bar code.



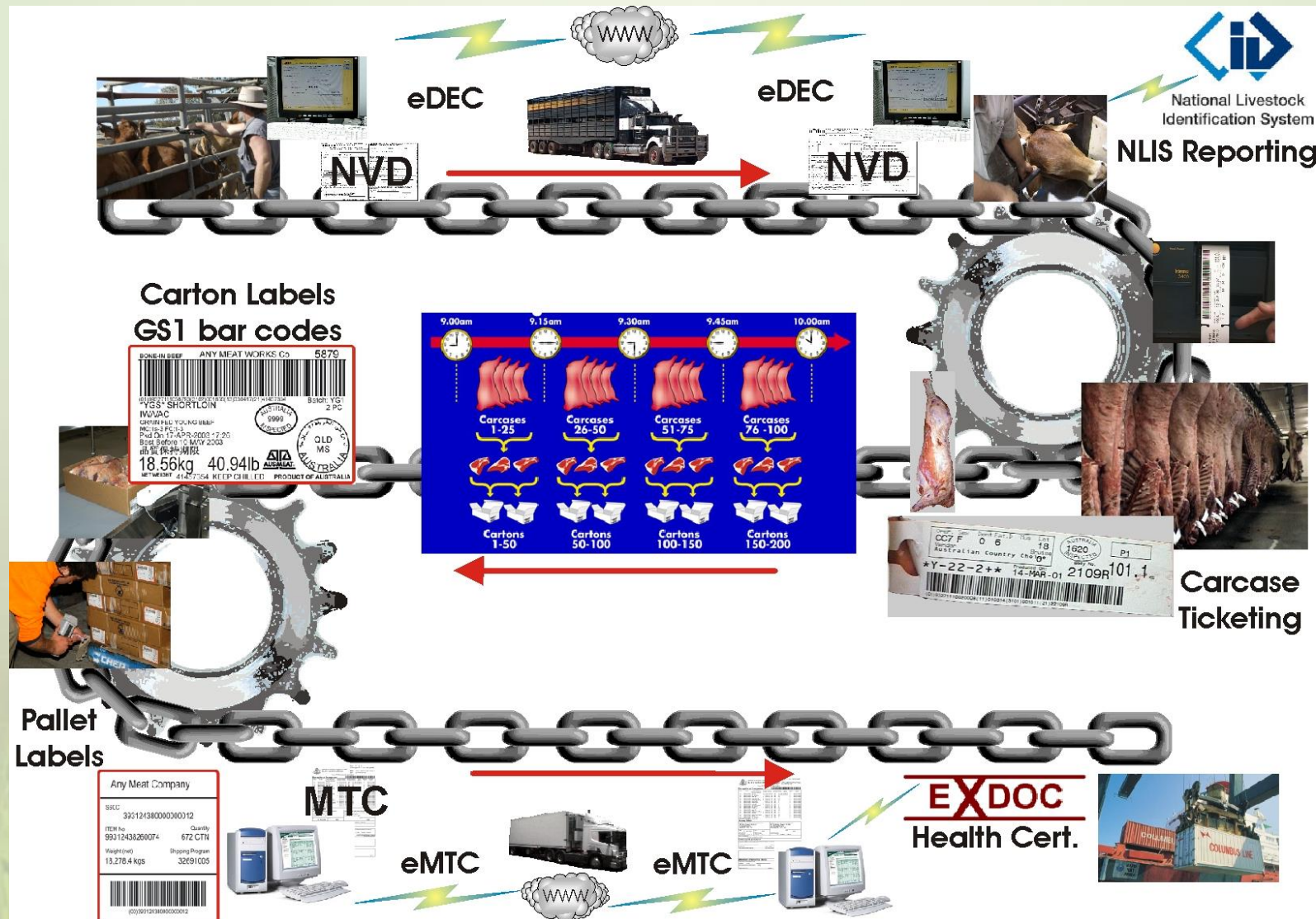
# The numbers.....

- Approx. 7.6 million cattle slaughter.
- 1.29 million tonnes of beef export.
- Approx. 64.5 million cartons of beef.
- Approx. 70,000 shipping containers of beef.

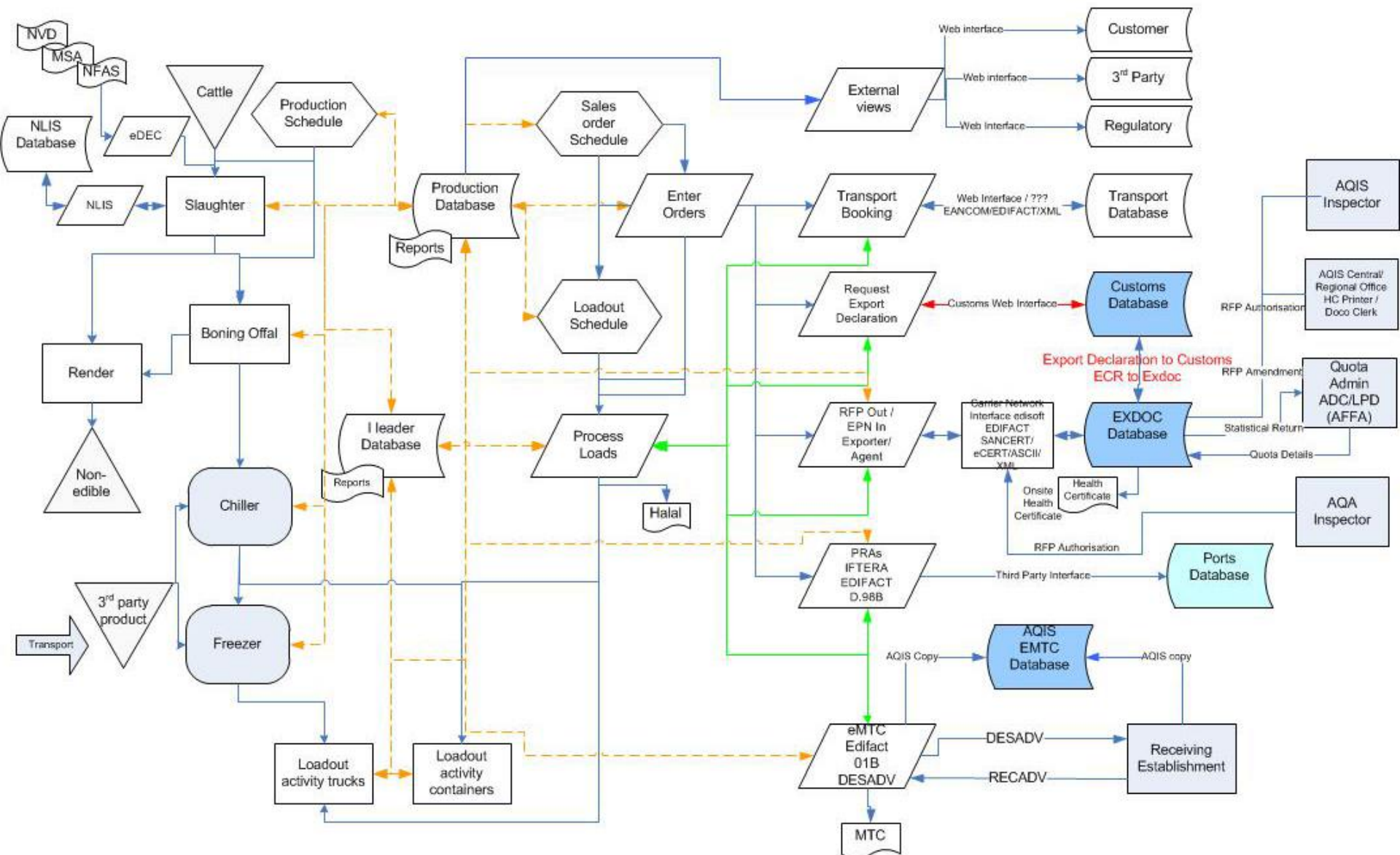
A shipping container of trim may contain multiple establishments (eg 3 plants) and production dates (eg 5 dates). Representing up to 15,000 possible individual cattle IDs!!!!



# Operational Paddock to plate

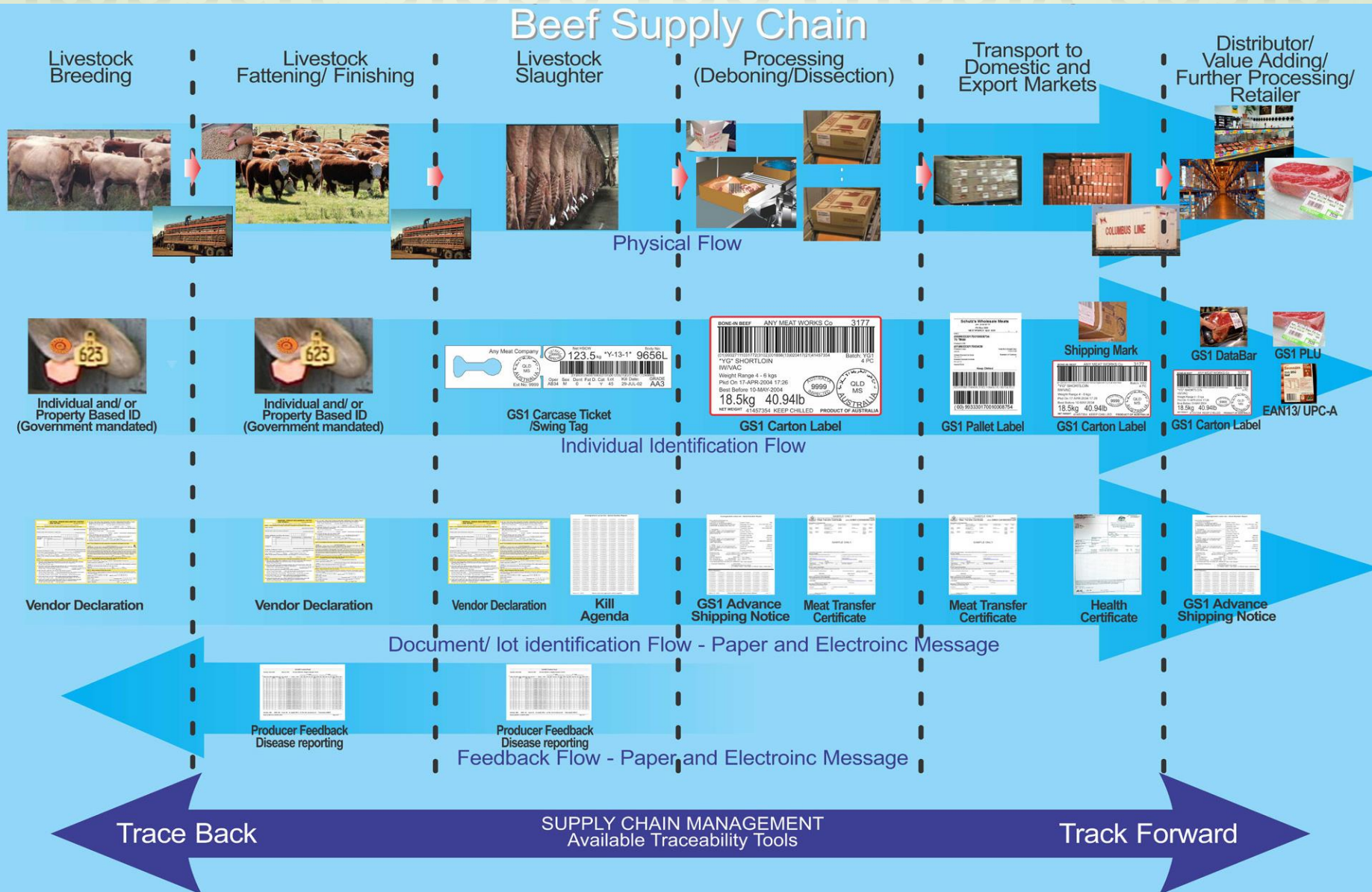


# Technical day to day activities





# Impacts along the supply chain



# What does it look like on a carton?

BONELESS BEEF  
PRODUCT OF AUSTRALIA  
**\*YG\* STRIPLOIN**  
GFYG  
WEIGHT RANGE 4kg - 5kg  
IW/VAC

ANY MEAT WORKS Co  
LONG FLAT ROAD  
ANYTOWN NSW  
**32307**  
KEEP REFRIGERATED

6PC



(01) 9 931671012345 3 (3101) 000262 (13) 140110 (21) 41457354

SLAUGHTERED ON: 16-APR-2014  
PACKED ON: 17-APR-2014 17:26  
BEST BEFORE: 29-MAY-2014

**26.2kg 57.8lb**  
NET WEIGHT Carton ID 41457354



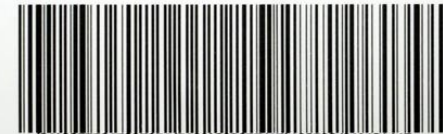
EST. NO.9999

BONELESS BEEF

2323

PRODUCT OF AUSTRALIA

4.07.21



(01)99333017023231(3102)002977(13)100729(21)694667

**BRISKET**

YG

IW/VAC

KEEP CHILLED

PACKED ON

29.JUL.2010

4

Pc

EST. No. 9491Q

**29.77 kg** Net Weight

Packed By SCHULZ'S W/SALEMEATS

BONELESS BEEF PKD BY EST 640  
PRODUCT OF AUSTRALIA  
**\*A-TRMG\*85CL**  
MW/VAC

**256008**



PACKED ON 14-JUL-11 KEEP CHILLED



(01)99339771000105(3102)002142(13)110714(21)0093(91)00000

256008  
0093  
19:06

NET WEIGHT **21.42 KG**



# Export Message Process



Export Establishment



Stage Cartons



Shipping Mark Cartons



Scan all cartons



Load and Seal container under supervision



Container exported



Container received



Container unloaded inspected and scanned



Stamped after successfully inspection

Re-Stamp or destroy after any corrective action



Commence RFP



Collect all information and update RFP. Check Market and product eligibility.



Complete RFP and request Health certificate



Export Meat Messaging Portal

Commence DESADV message with all carton scan



Create DESADV message containing every carton bar code (serial number), including Health Cert Number



DESADV message sent to receiving inspection store, final destination/customer and copy to DA.



DESADV message received by inspection store and cartons scanned and matched to Health Cert to create Verification report and RECADV Message.



RECADV Message sent to exporter as well as copy to DA.

If any errors are detected the RECADV Message sent to exporter as well as copy to DA. Reported errors actioned by exporter. Any requirements for remarking are through the use of the "Request for Re-marking of Carton destined to the USA form".



Linked data

Linked data

Linked data

Linked data

SSCC 993487310090000125

**Verified Carton Report**

Exporter / Consignor

Really Good Meat Company

Building 6

1 Slaughter Road

QLD 4999 AU

Consignee

My Cold Store

65 Long Street

Coldville

QLD 4000

Buyer

Meat Importing Company

1111 Import Road

Importville

NJ 06584 US

Notify

Meat Importing Company

1111 Import Road

Importville

NJ 06584

Shipping Line Really Good Shipping Co

Vessel/Aircraft Good Ship/ V443

Voyage

Date of Departure 20140623

Port of Loading 9999 loadout Street AU

Port of Discharge 8888 Import Road US

Final Destination

Shipment Reference

Description

BOVINE TENDERLOIN BONELESS BEEF IW/VAC TENDERLOIN

Carton Count 280

Message File Name 993487310090000125A

Message Date 20140623

Container Number 99889988

Gov. Seal No. 999999

Carrier Seal No.

Consignor Seal No.

Health Certificate 4536

EXDOC No. 4235

Goods Decl. (ECN) 1234

Bill of Landing 789678

Invoice No. 6578

Order No. (purchase) 65875

Species BOVINE

Country of Origin AUSTRALIA

Establishment No.

9999

Port Marks

ABC123

Net Weight Total

**Scanned and Verified (Eligible Product)**

Description: ABC123

Scanned and Verified: 260

**Scanned and Missing Mark**

Description: ABC123

Scanned and Missing Mark: 3

019931234501123431020016201314062321053055280020

019931234501123431020015101314062321053033100020

019931234501123431020017001314062321050024370020

**Scanned and Illegible Mark**

Description: ABC123

Scanned and Illegible Mark: 1

8/4/2014

Page 1

**Verified Carton Report**

019931234501123431020015601314062321053035800020

**Carton(s) Scanned in Shipment but Incorrectly Marked**

Description: ABC123

Scanned and Incorrectly Marked: 3

019931234501123431020015801314062321050019690020

019931234501123431020014801314062321053044080020

019931234501123431020015901314062321053035810020

**Carton(s) not in shipment but included in message**

Description: ABC123

Missing Carton(s) (not found in consignment): 13

019931234501123431020016401314062321053026120020

019931234501123431020017101314062321053024770020

019931234501123431020016801314062321053027110020

019931234501123431020014601314062121053036260020

019931234501123431020015001314062121053041140020

019931234501123431020015301314062121053042290020

019931234501123431020016801314062121053062350020

019931234501123431020016701314062321053027990020

019931234501123431020017101314062321053025500020

019931234501123431020017801314062321053024580020

019931234501123431020015601314062321053021120020

019931234501123431020015501314062321053028600020

019931234501123431020017901314062321053016360020

**Extra Cartons (Scanned and found in consignment)****- but should not have been in consignment**

Incorrect Carton(s) Scanned in consignment: 4

019931234501123431020016801314062121053012360020

019931234501123431020015301314062121053012560020

019931234501123431020015001314062121053041240020

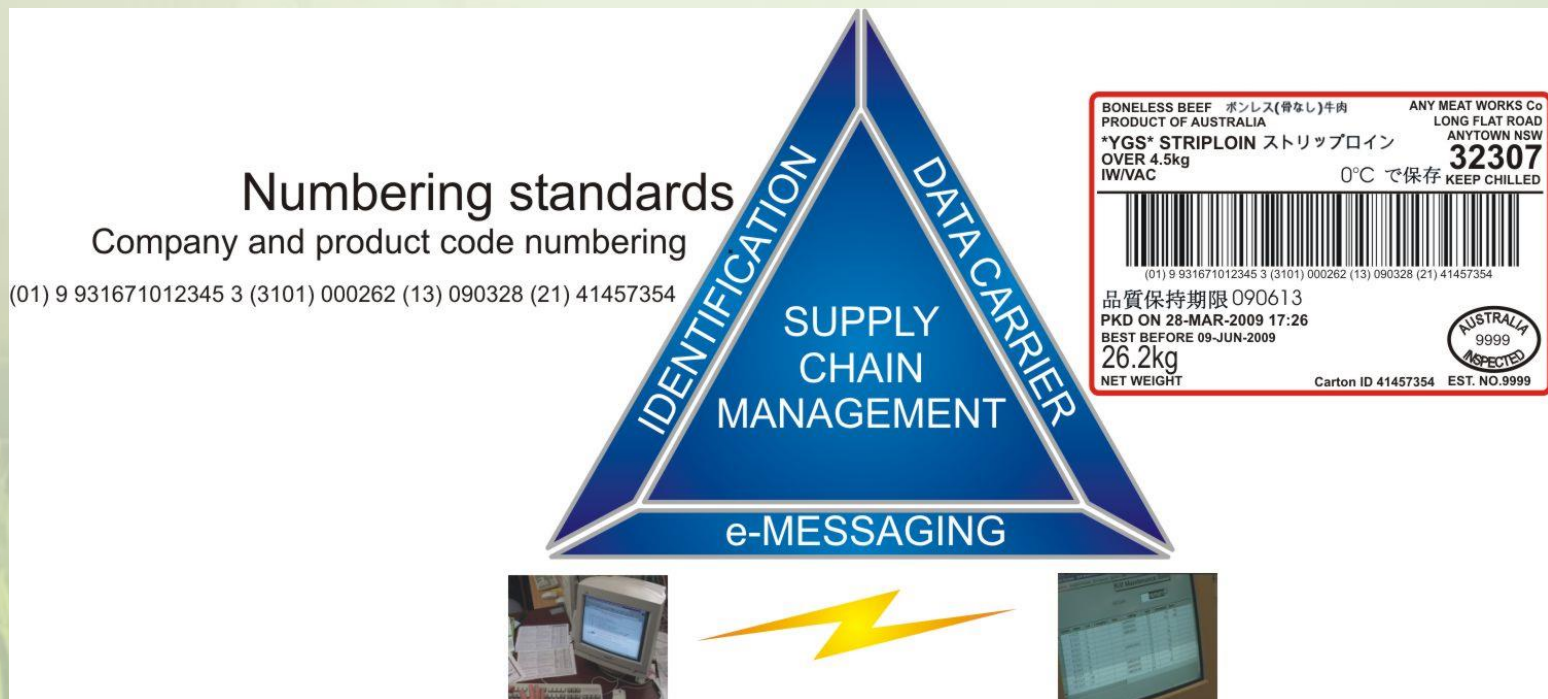
019931234501123431020014601314062121053031230020

8/4/2014

Page 2

# Meat Industry Information Standards - 'Bar coding'

- \* Coding information - standard numbering on carcase, carton & pallet labels
- \* Representing information - bar codes, RFIDs, pallet labels, carton labels and carcase tickets
- \* Sending information - eMessaging transmitting data between trading parties (Export messaging, eMTC and eDec)





# Emotive Consumerism .....

What do consumers think of paddock to plate traceability:

- Traceability is an emotive consumer driver. Just like animal welfare, ethical farming, sustainable farming, religious requirements (e.g. Halal) and many others. It is not a logical driver it is an emotive driver.
- Expected. Consumer expectations are that:
  - All food is fit for purpose and it would not be available for sale if it was not fit for purpose;
  - All food is fully traceable;
  - All food is fully tested through a government supervised program.
- Won't pay more for traceability. If two products of the same quality are next to each other on the shelf and one has lots of traceability details (e.g. the farm where it was grown) and one does not. Over 90% of consumers will make the choice based on price.
- Where supermarkets see a consumer emotive driver growing to the point of expectation, the requirement is implement for the product line and the old product lines phased out. E.g. Sow stalls and cage free eggs.

# What are the costs and who pays...

## *Traceability is Free, well sort of...*

- Some parts of the paddock to plate traceability are regulatory. You have to do it. So you can either do it properly or cut corners. There is not much different in terms of costs.
- Collect data at each point in the processing chain (livestock arrival, slaughter, chillers, boning room, loadout) as well as each point in the supply chain. Collecting data costs. But the costs should be covered by improved inventory management, lower stock holdings, better date management of product, less errors/ claims, etc.
- Improved regulatory compliance with lower regulatory supervision costs.
- Make the traceability data visible to your supply chain.

# Carton Bar code search

Carton Search - Internet Explorer

http://www.meatmessaging.com/search-carton.asp?pbar=1

Carton Search

File Edit View Favorites Tools Help

MEAT INDUSTRY GS1 EANCOM DESPATCH ADVICE (EMTC AND EXPORT)

### Carton Search

Enter a GS1 compliant meat carton bar code to commence a traceback.

[For more information on Meat Industry bar codes click here.](#)

Example: (01)99399999948151(3102)001510(13)130921(21)10602501

GTIN:

Comp. prefix:

Name:

Est No:

Product code:

Weight:

kg

Date:

Date Type:

Serial No.:

### Logistics Information

**Movement history:**

Date	Country	Est No.	Move type	Method	ID	Packing ID	Doc Type	Doc Number	Dest. (Est if AUS)
20131004	AUS	9999	Load out	Truck	383KBK	0099123456789012	eMTC	123456	9998
20131007	AUS	9998	Export	Cont.	MSKU6011672	QB1234	Health cert	234575	AUBNE (Patricks)
20131010	AUS	AUBNE	Export	Ship	OLGA MAERSK	MSKU6011672	Voyage	337N	US PHL

2014 © Meat Industry GS1 EANCOM Despatch Advice




# Detailed Carton Bar code search

GS1 meat carton online traceback - Internet Explorer

http://www.qrtc.mobi/cartontrace/default.asp?pbar=1

GS1 meat carton online trace...

File Edit View Favorites Tools Help

 **GS1 meat carton online traceback**

Enter a GS1 compliant meat carton bar code to commence a traceback.  
[For more information on Meat Industry bar codes click here.](#)

Example: (01)99399999948151(3102)001510(13)130921(21)10602501

GTIN:

Comp. prefix:  Name:  Est No:

Product code:

Weight:  kg

Date:  Date Type:

Serial No.:

**Production Information**

**Livestock source**

Breeding	Backgrounding	Finishing	Last Property	NVD Serial Nos	Life time traceable	Slaughter/Kill dates
AUS	AUS	AUS	NA123456	30499995	Yes	20130920
AUS	AUS	AUS	NA998899	30498885	Yes	20130920
AUS	AUS	AUS	NA999922	30497775	Yes	20130920

**Boning room carton production details**

Date	Run Start Time	label Time	Run End Time	Batch	Run
20130921	08:45	10:37	11:00	AE332134	5

Note: Listing shows all carcass that entered the boning room up until the time the carton label was printed.

# Animal search from Carton Bar code

GS1 meat carton online traceback Carcase Summary - Internet Explorer					
http://www.qrtc.mobi/cartontrace/carcase_summary.asp?b_code=9999_20130921_1037					
File Edit View Favorites Tools Help					
Boning room entry carcase listing summary					
Details					
Boning date: 20130921					
Run number: 5					
Boning batch: AE332134					
Label time: 10:37					
No. of carcasses: 93					
Body RFID	NLIS	Entry time	PIC	NVD Serial No.	Life time traceability
983	942 000003036010 NB511226ZBG08212	8:15	NA123456	30499995	Y
984	982 000167244260 NI250532XBF02792	8:15	NA123456	30499995	Y
985	982 123457351058 NF020862XBG00025	8:16	NA123456	30499995	Y
986	942 000002869041 NF330051ZBGG0700	8:20	NA123456	30499995	Y
987	942 000002012288 QEJI0081ZBF00291	8:21	NA123456	30499995	Y
988	982 123460284027 NJ590811XBG0134	8:22	NA123456	30499995	Y
989	982 000115348025 NG590357XBD02399	8:23	NA123456	30499995	Y
990	982 000168481183 QICL0599XBG02316	8:23	NA123456	30499995	Y
991	964 001002728936 T.JAS0061MBF00660	8:26	NA123456	30499995	Y
992	942 000002847577 NF330051ZBGG1798	8:27	NA123456	30499995	Y
993	964 001003127321 QDJI0178MBG03333	8:28	NA123456	30499995	Y
994	982 000183657482 QFBR0077XBG07227	8:29	NA123456	30499995	Y
995	982 000187714310 QDWW0731XBG00667	8:30	NA123456	30499995	Y
996	982 000183657395 QFBR0077XBG07321	8:30	NA123456	30499995	Y
997	982 123458871864 NF020862XBG00059	8:31	NA123456	30499995	Y
998	942 000002756186 NF330051ZBGG1790	8:32	NA123456	30499995	Y
999	951 000017516880 NG330061LBF03510	8:33	NA123456	30499995	Y
1000	982 000043633113 QECL0081XBA00579	8:34	NA123456	30499995	Y
1001	982 123460283912 NJ590811XBG00131	8:40	NA123456	30499995	Y
1002	982 000186862219 NC501804XBG01789	8:42	NA123456	30499995	Y
1003	982 000161992745 T.JAS0061XBF00057	8:43	NA123456	30499995	Y
1004	982 000182193439 NG410600XBG01105	8:43	NA123456	30499995	Y
1005	942 000002760524 NF330051ZBGG1657	8:45	NA123456	30499995	Y
1006	982 000161371296 NE410412XBF03407	8:45	NA998899	30498885	Y
1007	982 123460284007 NJ590811XBG00058	8:46	NA998899	30498885	Y
1008	982 000183641204 QFBR0077XBG07275	8:46	NA998899	30498885	Y
1009	942 000003091938 NB511226ZBG08338	8:47	NA998899	30498885	Y
1010	982 000161963760 QHES1303XBF00042	8:47	NA998899	30498885	Y
1011	982 123460283740 NJ590811XBG00057	8:49	NA998899	30498885	Y
1012	942 000002845374 NF330051ZBGG1339	8:50	NA998899	30498885	Y
1013	982 123458871814 NF020862XBG00063	8:50	NA998899	30498885	Y
1014	951 000016610134 QFIS0095LBF01097	8:51	NA998899	30498885	Y
1015	982 000161996094 T.JAS0061XBF01663	8:54	NA998899	30498885	Y
1016	982 000188935030 NF020862XBG00035	8:56	NA998899	30498885	Y
1017	951 000500174355 NB020822LBG00272	9:01	NA998899	30498885	Y
1018	942 000002760551 NF330051ZBGG1223	9:03	NA998899	30498885	Y

# Domestic Market perception of traceability....

- What do wholesalers say about traceability?
  - *“Not been asked for anything like that”*
- What do butchers say about traceability?
  - *“Not interested, don’t see the demand”*
- Specialist butchers/ brand differentiation?
  - *“Our specialty is organic and natural meat with full traceability and sourced only from sustainable farms where we care about our farmers.”*

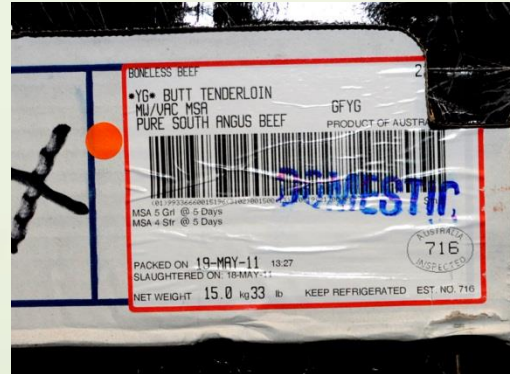


# Export Market perception of traceability....

- Regulatory environment where there is a demand for evidence. Paddock to plate is expected with the underlying data along the whole supply chain to support it.  
(Meatmessaging.com)
- Import country market expectations are the drivers for traceability. If the importer needs traceability, then it is a requirement that must be met.

# Why is training important?

## ‘Operator errors’



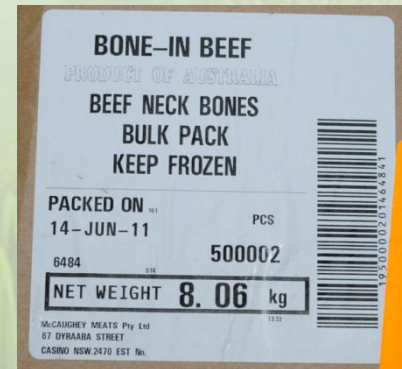
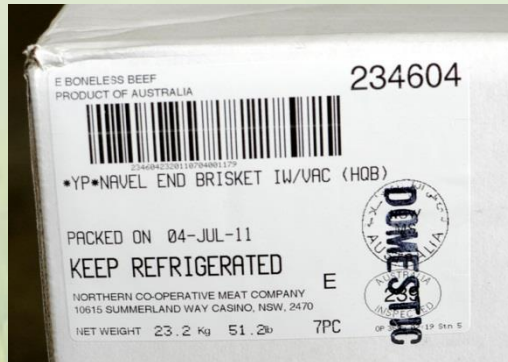
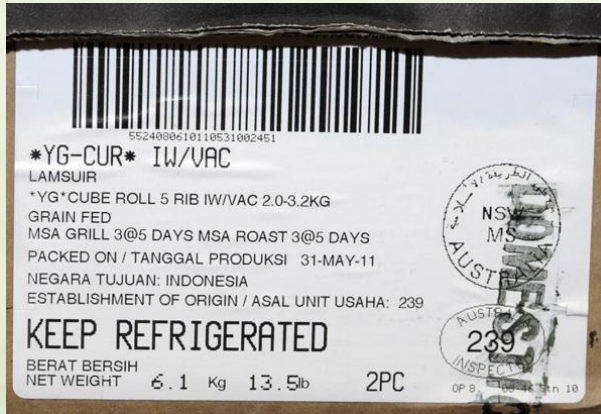
# Why is training important?

## ‘Product set up errors’





# Why is training important?



# At a processor level Who needs training?

- \* **QA personnel** - Need to know how to check that the labels comply with AUS-MEAT/ AQIS and fact sheet requirements. Monitoring program to ensure all labels are compliant.
- \* **Boning room/ Offal room supervisors** - Need to know what a correct label looks like and that suitable steps are in place to make sure that stay correct.
- \* **Carton label operators** - They need to be able to tell when labels are printing correctly and when they are not so they can tell someone that equipment maintenance is required. (Reprinting 2 days production because of a fault is not very pleasant.)
- \* **Carton strappers** - Don't strap over the carton labels. Reject cartons with missing, peeling or damaged labels.
- \* **Loadout supervisors** - They need to be able to tell the difference between a correct and incorrect label including print quality and placement as well as damage to labels.

# For more information?

**MINTRAC** - [www.mintrac.net.au](http://www.mintrac.net.au) Application of GS1 system/ bar coding for the meat industry - eLearning Resource

**AUS-MEAT** - [www.ausmeat.com.au](http://www.ausmeat.com.au) - Industry Standards - Electronic Information Standards.

**GS1** - [www.gs1.org.au](http://www.gs1.org.au)