Review of Industry Capability GS1

Meat & Livestock Australia acknowledges the matching funds provided by the Australian Government and contributions from the Australian Meat Processor Corporation to support the research and development detailed in this publication.
## Contents

1. Project summary ................................................................. 3
2. Project Purpose ............................................................... 4
3. Project Status ................................................................. 4
4. Appendix ............................................................................... 5
1 Project summary

The purpose of this project was to provide information to the Port Mark Elimination committee to assist them in investigating the possibility of establishing a process that would deliver more consistent product identification, control and inventory management and may eliminate the need for port marking for beef and sheep meat. The Port Mark Elimination committee was formed by AMIC and AQIS under the auspices of Export Meat Industry Advisory Committee (EMIAC).

Port-marking or lack of it has been the largest reason for rejections of Australian meat in the US. The problem has been exacerbated by the increase in chilled meat entering the US from Australia. MLA trials in 2003 involving Australian export beef companies and FSIS (Food Safety and Inspection Service) identified the GS1 system as a possible alternative to port marks.

This project involves a comprehensive review of all export listed companies and their supply chains to determine their GS1 status.

Areas included were:

- Method for product identification for carcase, carton and bulk products including carcase tickets, carton labels, pallet labels, shipping marks
- The ability to utilise scanning and inventory systems for tracking and tracing product
- Ability to utilise electronic messaging within the supply chain
- Understanding of AQIS systems and their capability

The project found that of the initial 166 export establishments initially identified, 70 were confirmed as current US listed export establishments that have boning facilities to create carton product bound for the US. 100% of these 70 enterprises have completed the survey questions in varying degrees of completeness. Over 75% are currently placing GS1 bar codes on their cartons and an additional number are capable but are not currently GS1 registered. When these non registered plants are included this brings this figure to over 84% of the plants are GS1 capable. The information obtained from the survey has indicated that of the 70 identified establishments all but approximately 9 are GS1 capable. These non-GS1 capable establishments are all very small except for one major company.

Due to issues regarding GS1 capability within the US system, the GS1 System is not currently being used to replace port marks.
2 Project Purpose

The purpose of the review was to assess the compliance of Australian US listed processors, wholesalers and cold stores to the GS1 system.

3 Project Status

The following project activities have been undertaken:

1. Development of the general survey tool.
2. Development of an online system to record the survey results.
3. Population of the online database with all export establishment utilising lists from AUS-MEAT and AQIS. These lists identified 166 current US export processors and AQIS listed cold stores.
4. Distribution of a letter to the CEO of the AMIC members requesting completion of the survey.
5. Contact by phone all 166 identified export processors and AQIS listed cold storage facilities to follow up with completion of the survey.
6. Survey list revised to 70 US due to the following:
   a. Establishments no longer exporting or not exporting to the US
   b. Not interested in completing the survey or providing information

As all the major processors have all participated in the survey, it is unlikely that the missing information will negatively impact the final survey results.

7. Meetings have occurred with key exporters addressing questions of their respective US importing distribution channels.
8. From the feedback by JBS Swift, Teys Bros. and Fletcher International a US distribution capability questionnaire has been prepared and issued for comment.

In summary of the initial 166 establishments initially identified, 70 have been identified as current US listed export establishments that have boning facilities to create carton product bound for the US. 100% have completed the survey questions in varying degrees of completeness. Over 75% of those that have responded are currently placing GS1 bar codes on their cartons and an additional number are capable but are not currently GS1 registered. When these non registered plants are included this brings this figure to over 84% of the plants that have responded are GS1 capable.

The information obtained from the survey has indicated that of the 70 identified establishments all but approximately 9 are GS1 capable. These non-GS1 capable establishments are all very small except for one major company.

Information on the capacity of the Australian Cold Storage facilities has been difficult to obtain. The large facilities all appear to be GS1 capable however this has not always been confirmed. The nature of cold storage facilities is to meet customer expectations and as such implement systems as needed. A number of the larger meat exporters operate their own system within the cold storage facilities thus removing the need for the cold store to be GS1 compliant.
4 Appendix

ONLINE SURVEY FORM

AMIC and AQIS have formed a working committee under the auspices of Export Meat Industry Advisory Committee (EMIAC) to investigate the possibility of establishing a process that would deliver more consistent product identification, control and inventory management that may eliminate the need for port marking for beef and sheep meat.

This online survey has been developed to collect and statically analyse the information needed by industry to move forward in this area.

All sensitive information that you provide will be collected, stored and used in accordance with the Federal Privacy Act 1988 (Cth) and the National Privacy Principles (NPPs).

The information you provide will only be used for the purpose of statical analysis. No personnel or sensitive information will be provided to any third party. Any stored survey information is protected from unauthorised access through the use of security procedures, as well as secure user logons and passwords.

If you have elected to be contacted or to be provided more information, this contact will be made through your industry association.
### Online Establishment Record – Company Details

#### Establishment Survey Details

#### Part A – Current Capability

What type of establishment:

1. Species
   - a) Beef Yes/ No ______ %
   - b) Veal Yes/ No ______ %
   - c) Sheep Yes/ No ______ %
   - d) Pork Yes/ No ______ %
   - e) Goat Yes/ No ______ %
   - f) Game meat Yes/ No ______ %
   - g) Other Yes/ No ______ %

2. Process
   - a) Slaughter Yes/ No
   - b) Boning Yes/ No
   - c) Value Add Yes/ No
   - d) Canning Yes/ No
   - e) Small goods Yes/ No
   - f) Retail ready Yes/ No
   - g) Cold storage Yes/ No
   - h) Third Party Logistics Yes/ No
   - i) Non-packer exporter Yes/ No

3. Markets (average over last 12 months):
   - a) Domestic Yes/ No ______ %
   - b) Export US Yes/ No ______ %
   - c) Export Japan Yes/ No ______ %
   - d) Export Korean Yes/ No ______ %
   - e) Export EU Yes/ No ______ %
   - f) Export South East Asia Yes/ No ______ %
   - g) Export Middle East Yes/ No ______ %
   - h) Export Pacific Islands Yes/ No ______ %
   - i) Export Canada Yes/ No ______ %
   - j) Export Russia Yes/ No ______ %
   - k) Export Taiwan Yes/ No ______ %
   - l) Export Mexico Yes/ No ______ %
   - m) Export Africa Yes/ No ______ %
   - n) Export other Yes/ No ______ %
**Current Systems:**
Brand/Vendor (e.g. SASTEK, Thorsys, Cedar Creek, Triton, McCarthy, Yartoo, etc.) and time (in yrs) the solution has been installed for

<table>
<thead>
<tr>
<th>Include Brand/Vendor</th>
<th>Time Installed(years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Lairage/livestock</td>
<td><strong><strong>/</strong></strong></td>
</tr>
<tr>
<td>2. Knocking/slaughter floor</td>
<td><strong><strong>/</strong></strong></td>
</tr>
<tr>
<td>3. Carcase grading, weighting ticketing</td>
<td><strong><strong>/</strong></strong></td>
</tr>
<tr>
<td>4. Chiller Assessment</td>
<td><strong><strong>/</strong></strong></td>
</tr>
<tr>
<td>5. Carcase load out</td>
<td><strong><strong>/</strong></strong></td>
</tr>
<tr>
<td>6. Carcase inventory</td>
<td><strong><strong>/</strong></strong></td>
</tr>
<tr>
<td>7. Boning room entry</td>
<td><strong><strong>/</strong></strong></td>
</tr>
<tr>
<td>8. Boning room traceability</td>
<td><strong><strong>/</strong></strong></td>
</tr>
<tr>
<td>9. Carton weight label</td>
<td><strong><strong>/</strong></strong></td>
</tr>
<tr>
<td>10. Carton inventory</td>
<td><strong><strong>/</strong></strong></td>
</tr>
<tr>
<td>11. Carton load out</td>
<td><strong><strong>/</strong></strong></td>
</tr>
<tr>
<td>12. Value adding</td>
<td><strong><strong>/</strong></strong></td>
</tr>
<tr>
<td>13. Retail ready</td>
<td><strong><strong>/</strong></strong></td>
</tr>
<tr>
<td>14. Meat sales</td>
<td><strong><strong>/</strong></strong></td>
</tr>
<tr>
<td>15. Export/EXDOC</td>
<td><strong><strong>/</strong></strong></td>
</tr>
</tbody>
</table>

**Bar codes in use:**
1. Carcase tickets  None, GS1, SASTEK, Other ______
2. Carton labels     None, GS1, SASTEK, Other ______
3. Pallet labels     None, GS1, SASTEK, Other ______

**Do you have a GS1 Membership(s):**
(GS1 is the international standards body for number and bar coding of trade and retail items. Go to [http://www.gs1au.org/home.asp](http://www.gs1au.org/home.asp) for more information)

Yes/ No  If yes, what is your membership number(s) : ______________

**Electronic message in use along some part of your supply chain:**

<table>
<thead>
<tr>
<th></th>
<th>Yes / No</th>
</tr>
</thead>
<tbody>
<tr>
<td>eDEC for (Bovine and Ovine) livestock arrival</td>
<td></td>
</tr>
<tr>
<td>ePigPass (Porcine) livestock arrival</td>
<td></td>
</tr>
<tr>
<td>eMTC for electronic meat transfer certificates</td>
<td></td>
</tr>
</tbody>
</table>
Work practice - Do you:
1. For Bovine and Ovine do you receive and process eDEC messages  Yes / No
2. For Bovine, Ovine and Caprine do you record the NVD Serial No. and detail into your Livestock System  Yes / No
3. For Porcine do you record the PigPass Serial No. and detail into your Livestock System  Yes / No
4. For Porcine do you Upload to the PigPass system the slaughter summary information  Yes / No
5. For Porcine do you receive and process ePigPass messages  Yes / No
6. If bovine, does your Slaughter system electronically record the NLIS number to a carcass ticket number  Yes / No
7. Are all carcass tickets scanned before load out or load in to boning room  Yes / No
8. Are all carton labels scanned before load out  Yes / No
9. Are pallet labels created before load out  Yes / No
10. Are pallet labels scanned before load out  Yes / No
11. Are eMTCs created for load out  Yes / No

Do you have full time IT personnel?
Yes / No  If yes, how many: __________

1. Who is your primary IT contact?
a. Name: _____________________
b. Position: _____________________
c. Phone Number: _____________________
d. Email address: _____________________

2. Would you like your IT representative to be kept informed of Industry Developments with Supply Chain Information standards, bar coding and other IT related industry issues?  Yes / No

3. Would you like to participant in industry webinars?  Yes / No

Future Direction:

Are you looking at adopting
1. GS1 bar coding for carcases  Yes / No
2. GS1 bar coding for cartons  Yes / No
3. GS1 bar coding for pallets  Yes / No
4. eDEC message receiving  Yes / No
5. eMTC message receiving/creation  Yes / No

Do you need assistance with traceability information, implementation or training including the areas listed above?  Yes / No
Part B – Current Volumes and Industry Issues

Production Information:

For each species slaughtered what is the number slaughtered per day?

<table>
<thead>
<tr>
<th>Species</th>
<th>Kill No. per day</th>
<th>Boning No. per day</th>
<th>Cartons per day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bovine</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ovine</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caprine</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Number and Tonnage of carcases loaded out per day:

<table>
<thead>
<tr>
<th>Species</th>
<th>Qty of Carcases</th>
<th>Tonnage</th>
<th>Export %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Species, product type, number or carton and tonnage of carton product loaded out per day:

<table>
<thead>
<tr>
<th>Species</th>
<th>Offal, Trim, Primal Frozen/chilled Qty cartons</th>
<th>Tonnage</th>
<th>Export %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Load out Methods:

<table>
<thead>
<tr>
<th>No. of Containers per week</th>
<th>No. of truck loads per week</th>
<th>No. of MTCs per week</th>
<th>No. of Health Certificates per week</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please estimate the number of hours/ costs per week required for the following:

<table>
<thead>
<tr>
<th>Hours</th>
<th>Cost (labour and other)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Please describe issues or problems that you have experienced over the last 12 months with MTCs, Port Marks, Health Certificates, reconciliation of loads or related activities:

_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________

Please describe issues or problems that you have experienced over the last 12 months with bar codes, product descriptions or other product identification activities:

_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________

If you could change some aspect of the export work practices, procedures or methods within your organisation what would they be?

_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________

If you could change some aspect of the AQIS export requirements and processes, what would they be?

_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________
Part C – Cost Benefit Details and Future Technologies

Over the last 24 months have you implemented GS1 bar coding for carcase or carton products? If yes can you describe the implementation process, costs, benefits and cost savings:

Implementation Process: _______________________________________________
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________

Implementation costs: _________________________________________________
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________

Benefits to your business: _____________________________________________
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________

Cost saving to your business: __________________________________________
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________
Do you believe that RFID or other new emerging technologies may streamline or improve efficiency in the carcase, carton, pallet identification, consignment or export processes? If yes please explain what technology and how it may be utilised:
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

What is the most important single industry factor that you consider needs to be changed in the product identification, consignment and exporting processes? What would be the cost saving to your business if this change occurred?
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

Are you intending to implement over the next 12 month any of the following process changes or new systems?

<table>
<thead>
<tr>
<th>Process or system</th>
<th>budget (if any)</th>
<th>Time frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>GS1 Bar coding of Carcases</td>
<td>Yes / No</td>
<td>_________</td>
</tr>
<tr>
<td>GS1 Bar coding of Cartons</td>
<td>Yes / No</td>
<td>_________</td>
</tr>
<tr>
<td>GS1 Bar coding of Pallets</td>
<td>Yes / No</td>
<td>_________</td>
</tr>
<tr>
<td>Electronic MTCs</td>
<td>Yes / No</td>
<td>_________</td>
</tr>
<tr>
<td>eDEC</td>
<td>Yes / No</td>
<td>_________</td>
</tr>
<tr>
<td>Other Systems (Please specify)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>