March 2009

John Wyld

Chairman NLIS Ltd.
Chairman, Victorian Ministerial Advisory Committee
m.s. “Chindwara”
B.I.S.N.Co.Ltd.
# Australia’s Cattle Industry

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<td>Cattle producing properties</td>
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<td>Cattle exported live</td>
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<td>Cattle slaughtered p.a.</td>
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<td>Average dairy herd size</td>
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<td>Typical beef herd size</td>
<td>100 – 400 head</td>
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Australian Livestock Background

- Total of ~28 Million Head of cattle
- Annual beef and veal production over ~2 million tonnes
- Total Gross value of ~$7.1 Billion.

Source: ABS, final estimates 2004
Australian Livestock Background

- Second Largest Exporter of Beef
- Export 65% of total beef production
- Export Beef value ~$5 Billion

Top ten world beef exporters

Source: USDA (2008)

Beef exports
Total = 957,482 tonnes swt (2008)

Source: DAFF
Market access is critical.

Australia exports 65% of its beef production.
Australia’s History of Cattle Identification

In late 1960s established:

• Brucellosis and TB Eradication programme
• Property Registration
• Tail Tags- trace back to last property
Traditional identification – tail tags
Problems in the 1980s and 1990s
Series of Residue incidents
*Damage to customers, export & domestic*

Consequences Industry had to deal with:

- Financial - losses, costs
- Physical - recalls, testing
- Political - reputation
1995

Decision by all Governments and industry to Establish a National, Uniform cattle identification and tracing system
National Livestock Identification System
Basic Assumptions

• must suit Australian conditions
• must be based on the “real world”
• must be affordable and effective
• must be nationally consistent
1995 to 1999 Building the system

- Co-operation between Government and Industry
- Co-operation between all sectors
- Single National Standard for performance
- National uniform numbering and PICs
- Decisions on database management & rules
Early Decisions

• Performance Standards
• Machine readable tags
• Life-time Retention
• Lifetime Performance
Key Conclusions:

- RFID Only
- Single Technology (HDX)
- National movement database – managed by MLA
- Needed to be Mandatory
Property Registration

• Each State maintains a register of cattle properties
• Each property is assigned a Property Identification Code (PIC)
• Cattle, sheep, goat and pig producers are required by law to have a PIC
Some Details

PICs relate to geographical locations
National Vendor Declaration – complements the NLIS system
Drivers for Identification become stronger

For example
UK FMD
BSE - UK, Japan, North America
Governance

- NLIS operates under the Safemeat partnership between the State and Federal Governments, and Industry
- A national industry committee monitors the operation of the system, and advises on business rules
- The States maintain PIC registers, and are responsible for legislation, monitoring and enforcement
- Industry, through Meat and Livestock Australia (MLA), operates the NLIS database which records movements between PICs, and disease, residue and market access information
Safemeat Partners

Department Agriculture Forests and Fisheries
State Governments
Cattle Council of Australia - Producers
Australian Meat Industry Council - Processors
Australian Lot Feeders Association – Lot Feeders
Livestock Saleyards Association – Saleyards
Agents Association
Dairy Australia – Dairy Producers
Australian Live Exporters Council – Live exporters
Meat & Livestock Australia – Industry Body
Animal Health Australia – Industry Body
NLIS Introduced in stages

NLIS Commenced as a voluntary system in 1999

Tags subsidised in State of Victoria

Mandated in Victoria 2002, and then all States by 2005
NLIS Database

- The NLIS Database currently:
  - Holds information on 181,000 PICs and 75 million devices
  - Has 30,000 database account holders
  - Receives an average of 6,000 interactions per day
  - Records an average of 55,000 cattle movements per day
  - Receives >99.5% of incoming information electronically
Creating a Win-Win

Important to build direct benefits to players along the chain

• Deal here with on-farm benefits
On-Farm: Beef

RFID Facilitates
- All record keeping
- Forecasting readiness for market, and forward selling
- Automatic & individual calculation of weight gain
- Recording of treatments and checking of withholding periods
- Reproductive information & Feedback from database
- Drafting by pre-determined criteria
- Inventory management
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**Total Head:** 320

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Management Number: Rescan

**20050117**  **670**

**Total Head:** 176

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- **Mob or Status:** 2005 Cows
- **Weight Gain:** 1.53
- **Session Average:** 1.50
- **Current:** 0
Management Number: **Rescan**

This Animal is still within a Witholding Period
Witholding Period expires: 12/03/2009
- Don't warn again this session

This Animal is still within an Export Slaughter Interval
Export Slaughter Interval expires: 24/03/2009
- Don't warn again this session

Weight: 3558.0
Total Head: 163

Weight Gain: -1.07
Session Average: 0
Current: 0
### KoolCollect (V3.05.03) - Koolomurt Pastoral Pty Ltd

**Session - Feb 23 2009 Draft 2008 hfrs to Feedlot for 3GMFS000 on 23/02/2009**

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- **Total Head:** 320
- **RFID or NLIS:** 982 000116427061
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- **Select Field 1:** 2

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</tbody>
</table>
Bottom Line Benefits
Many jobs made easier – less work in yard, more in the race
Record keeping easier and accurate
Marketing made simpler and more profitable
Drafting made easy
Better OH & S outcomes
More precision in management decisions
Breeding based on facts
A more secure industry
Downside
Some cost in tags
Initial cost of equipment installation
Cost of software

However
Cost can be limited to tags only, if there is no desire to capture the benefits of RFID
A quick look along the supply chain

- Transport
- Saleyards
- Meatworks
- Knackeries
Transports
Saleyards
Saleyards
Abattoirs

- Panel reader for automated reading
Abattoirs

- NLIS assists with meat inspection
- Cattle of interest are ‘flagged’ for inspection/testing
- Exception files are refreshed when processors upload ‘kill files’
Important Issue is the Rapid Utilisation of Tracing information from the database in the event of an emergency:

- How to use the data
- How best to present the information

Still Early days
Example of Visualisation tools
THANK YOU