# Improving Livestock Traceability

Options for the Livestock Export Industry

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## Project W.LIV.3039

## Livestock Export, ESCAS, Identification and Traceability

- Compliance with ESCAS, robust identity and traceability are crucial to industry in defending welfare commitment
- ► Inability to maintain traceability undermines ESCAS
- Permanent identification required to ensure animals that are removed from and those that remain in approved supply chains can be identified at all times



## Methodology

#### **Desktop Review & Interviews**

- Commercially available ID methods for cattle, sheep and goats in Australia were reviewed
- Commercially available ID methods for cattle, sheep and goats in New Zealand, the USA, Europe, South America and other relevant countries were reviewed
- Review new developments in ID methods for livestock or methods that are being developed
- Review ID and tracking methods used in other industries to determine suitability and adaptability for livestock identification



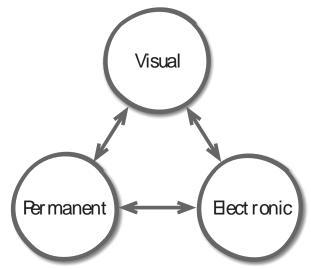
# **Findings**

#### Benefits of ID & Traceability

- Ownership, trade support, food safety, animal welfare, improved efficiency, biosecurity and research
- Protects reputation and reduces losses in the event of disease outbreak
- Data accumulated through monitoring animal identification and performance can inform commercial decisions, research and extension
- Incentive for industry to manage identification and data for their commercial benefit, not punitive or regulatory



## **Necessary Attributes**



- ► The combination of these three attributes must form part of any robust identification and traceability system
- ► There is no single identification method that provides all three attributes
- Permanent and robust identification with electronic capture provides a commercial opportunity, through data analysis, to every supply chain participant

# High Tech Solutions

#### On the Horizon

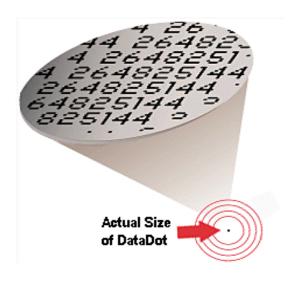
- DNA sampling and retina scanning can provide certainty of ID
- Now come in handheld units suited to field use, but are expensive, time lag for DNA results, retinal scanning requires head baling





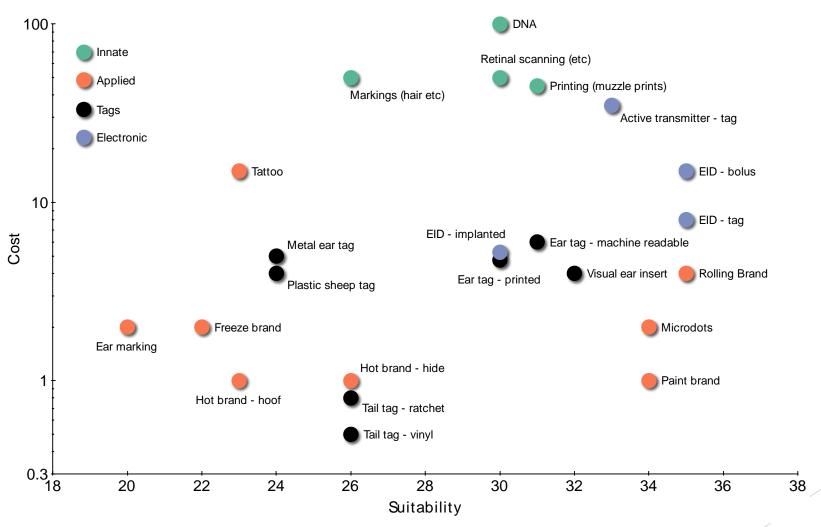
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#### **Microdots**



- Microdots, applied in fluorescing adhesive are being used to deter stock theft in Australia
- ► Applied to the horns (permanent) or hooves (up to 12 months) they may provide an additional tool to manage "leaky" supply chains

## Identification Evaluation



## **Identification Preferences**

#### A Combination Of

- 1. RFID ear tags together with a highly visible indelible mark being:
- A. Paint brand of distinctive shape and colour, applied to a specific body area, together identifying the animal to an exporter and consignment or
  - B. Rollerbrand of distinctive design and colour, applied along the backline, together identifying the animal to an exporter and consignment or
  - C. Visual ear insert of distinctive shape and colour identifying the animal to an exporter and consignment

The combined methods provide permanent & robust identification and a deterrent to livestock being removed from approved supply chains

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## Roller Brand & Ear Insert





# **Traceability**

#### **Australia**

- NLIS in Australia provides excellent traceability (for cattle)
  - ▶ But no follow through after loading
- Lightweight handheld scanners with camera, data & GPS capability could be used in abattoirs or feedlots globally to confirm slaughter
- Industry owned (independently managed) database to ensure integrity and validate ESCAS / LGAP AND
- Provide potential commercial benefit through the supply chain

## What next?

- Draft report has been submitted
- Final report due by 30<sup>th</sup> December
- Presentations to industry
- Recommendation to investigate supply chain efficiencies that can be extracted from better use of RFID records

# Thank you