

Blue Trace eID Integration

Project code
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Prepared by
Ellie Hitz

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Project description

With the introduction of mandatory sheep eID requirements in NSW, all sheep and goats are to be electronically identified (eID) and recorded in the National Livestock Identification System (NLIS) database. As a result our organisation undertook an evaluation of the BlueTrace eID readers. The project was implemented in stages at our Dubbo processing facility. In Stage 1, the performance of BlueTrace panel readers was assessed on the slaughter floor, focusing on scan accuracy and throughput rates. Based on these findings, Stage 2 involved refinement of panel placement and configuration to optimise performance. Stage 3 explored the integration of back-office software solutions to enhance data handling and traceability.

This project was undertaken to assess the performance of BlueTrace electronic identification (eID) readers in a commercial sheep processing facility. The target audience of this report includes industry bodies such as AMPC, Department of Primary Industries (DPI) and other processors - key stakeholders who will be directly impacted by these regulatory changes. The DPI required reliable data to evaluate the BlueTrace system against other available tag technologies, such as Allflex, in preparation for broad industry adoption.

Project content

The project had 3 main objectives, listed below.

Determine Efficiency and Capacity of BlueTrace RFID panels

Evaluate Tag Compatibility

Integration of Data with Production Systems

This was carried out by assessing read rates of the BlueTrace system against manual wand data. This comparison allowed the calculation of the percentage of animals successfully scanned by Blue Trace (read rate). This was replicated over a 3 month period, whilst the positioning of the panels were refined.

Project outcomes

Read rate of panel was determined by comparing results from BlueTrace with manual wand data, across 4 different sessions. Between each session position was refined. Summary of results below.

Date	BlueTrace Read Rate	Sample Size (Head count)
03/04/25	87%	100
15/04/25	81%	295
16/04/25	95%	400
04/06/25	93%	221

DPI provided below intel to further validate these results. *Fletcher International Export (Dubbo) processing plants panel reader is reading at 90%, this is looking at the NLIS uploads against sale yard scans. The average of the state is just on 50%.*

Regarding, system integration the addition of the mob change button was successful. The identifying number in the system will now increment automatically with the press of the button.

Benefit for industry

The results of the BlueTrace panel reader trial demonstrate a clear upward trend in read rate performance over the three-month period, with accuracy improving as panel placement and configuration were refined. Early trial dates showed moderate performance (e.g., 81% on 15 April), but later dates reached consistently high read rates above 90%, indicating that optimisation of panel height and alignment played a significant role in maximising scan success across varying carcasses.

The results of this project will inform DPI's broader evaluation of eID technologies and help with wider industry compliance.

The identification of several factors that could be influencing scan failures also assists the wider industry, these included but are not limited to – non reading tags, incorrect tag placement, carcass positioning, wool interference and physical obstruction.

This project also highlighted broader operational realities, including the significant burden placed on processors by outdated legislative requirements and inconsistent upstream compliance with tagging mandates. This triggered conversation across the industry involving DPI to address such concerns.

Despite these limitations, our organisation has demonstrated a strong commitment to compliance, and this project shows that with the right technology in place, industry can meet read rates of 90%+.

Useful resources

NA