



final report

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eNVD Nolan Meats software development

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Executive Summary

This project was undertaken to determine the feasibility of implementing the eNVD system within the red meat industry. Lessons learned and gaps identified during this period would be analysed to further improve the eNVD system, and would assist MLA in determining a recommended way forward for system roll-out.

This was achieved by updating Nolan Meats' existing software system to include eNVD capabilities. Trials were conducted between Nolan Meats' NeusaVale Backgrounding, Wide Bay Feedlot and the Nolan Meats Gympie Abattoir properties.

The trials successfully demonstrated commercial implementation of eNVD capabilities, as well as the ability to integrate eNVD information within Nolan Meats' commercial system.

Benefits to industry will be realised once the eNVD system is widely used nationally, and once other related industry integrity data (e.g. NFAS, MSA) is included as part of the system.

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1 Project Objectives

- Develop eNVD capabilities within Nolan Meats' software suite.
- Conduct live trials within Nolan Meats' integrated supply chain.
- Based on results from the trial, identify potential refinements to the eNVD system.
- Review and assess factors that may impact the roll-out and uptake of the eNVD system in the marketplace.

2 Methodology

2.1 Software development

The existing Nolan Meats software suite was modified to include eNVD capabilities, in parallel to existing eDEC capabilities. The ability to receive and send eDECs was retained, pending inclusion of MSA and NFAS declaration forms within the eNVD system.

2.2 Field trials

Trials were conducted between NeusaVale Backgrounding, Wide Bay Feedlot and the Nolan Meats Gympie Abattoir properties. Trials began in December 2015.

| Business/trading name | State | User type | Species type trialled |
|-------------------------|-------|-----------|-----------------------|
| NeusaVale Backgrounding | QLD | Producer | Cattle |
| Wide Bay Feedlot | QLD | Feedlot | Cattle |
| Nolan Meats Abattoir | QLD | Processor | Cattle |

3 Results

3.1 eNVD records

A total of 42 eNVD records have been submitted to-date (as of 6 April 2016):

| Business/trading name | User type | Number of eNVDs submitted |
|-------------------------|-----------|---------------------------|
| NeusaVale Backgrounding | Producer | 4 |
| Wide Bay Feedlot | Feedlot | 38 |
| TOTAL | | 42 |

Movement types that were trialled were:

| Movement type | Number of eNVDs submitted |
|----------------------|----------------------------------|
| Producer to Producer | 3 |
| Producer to Feedlot | 1 |
| Feedlot to Producer | 3 |
| Feedlot to Feedlot | 10 |
| Feedlot to Abattoir | 25 |
| TOTAL | 42 |

Out of the 42 eNVDs that were submitted, one eNVD was cancelled.

No eNVDs were updated because Nolan Meats did not include the update function into their software, opting instead, for simplicity's sake, to have the user cancel the eNVD if it had been incorrectly submitted.

All 42 eNVDs successfully submitted the following key information to the NLIS database:

- The NVD serial numbers and offline reference numbers.
- The PIC numbers of the consignor and consignee properties.
- The LPA accreditation status of the consignor property.
- The NVD declaration date (as per Part A on the paper NVD), movement date (as per Part B on the paper NVD), and date that the eNVD was submitted to NLIS.
- The total number of head of livestock consigned.

The eNVDs were successfully received by Nolan Meats' software.

Printing of look-alike paper documents were successfully demonstrated in Nomad:

4 Discussion

4.1 Late submissions to NLIS

During the trial, some Nolan Meats eNVDs were submitted to the NLIS database a few days after the animals were transported. This was attributed to the current workflow requiring the completion of the transporter information (Part B on the paper NVD) prior to submission to NLIS, and a lack of awareness on the consignors' part to ensure timely submission of eNVDs so that consignees would receive the eNVD on their end.

In response, it was re-emphasised to consignors in the trial that eNVDs were to be submitted as soon as possible to ensure consignees would receive the eNVD by the time the livestock arrived at its destination. As a result of this communication, there has been a notable drop in the number of eNVDs with this issue, and 100% compliance over the last few weeks.

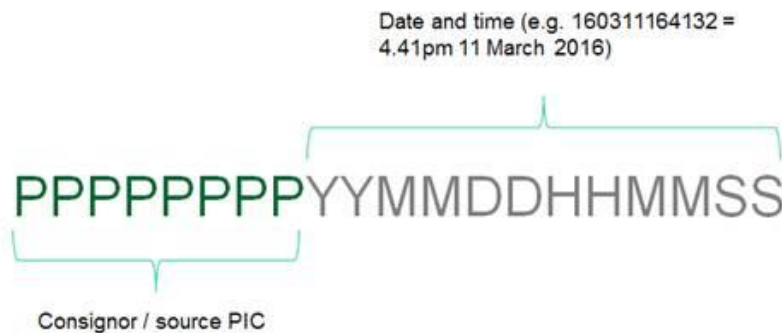
The eNVD workflow should be further reviewed to improve the efficiency of the eNVD submission process and to encourage earlier submission of eNVDs by consignors. This may include enabling consignors to submit eNVDs (Part A on the paper NVD) to NLIS up to three

days before the day of consignment. Then on the day of consignment, stock numbers, descriptions and the destination (e.g. due to a feedlot pen being full) can be confirmed and the transporter information can be filled out and submitted.

4.2 Barcode length too long due to length of reference number

The current reference number of 22 characters in length translates into an enormous barcode on the eNVD print-out: 70mm at 0.25 magnification if only the first 4 digits are alpha. This makes it very difficult to keep the barcode EAN (GS1) compliant.

The reference number is constructed using the following formula:



For instance, if the first digit is “3” followed by 4 alpha digits, the barcode will be about 10mm longer (the barcode is GS1-128 encoded at 0.25 magnification, so it has to switch between code A which uses 1 module per digit, and code C which uses 1 module per 2 adjacent numbers). This would also mean that 3 lines would need to be used for the title.

The barcode is useful for entry and exit scanning, and is currently used by Nolan Meats when animals move in and out of their properties.

Even if the year (“YY”) and seconds (“SS”) drops off the reference number, because the number is alphanumeric (i.e. made up of both letters and numbers), this would only result in about 1.6cm reduction in the barcode length.

Using only numbers for the reference number would reduce the length of the barcode considerably.

5 Conclusions/Recommendations

The project successfully demonstrated commercial implementation of eNVD capabilities, as well as the ability to integrate eNVD information within Nolan Meats’ commercial system.

Nolan Meats currently already ingests eDEC information (which includes MSA and NFAS information) into Nolan’s proprietary system. As such, the eNVD system simply replaces eDEC but without MSA and NFAS support. In order for Nolan Meats to truly benefit from the eNVD system, industry-wide adoption and the inclusion of other related industry integrity data (e.g. NFAS, MSA) is recommended.

Nolan Meats will continue to work with MLA to prepare for full production use in line with SAFEMEAT policy and license requirements.

6 Key Messages

This development is significant for industry as the eNVD system is anticipated to bring the following benefits:

- Reduce the cost of having to re-process inaccurate or incomplete NVDs received directly from consignors/sellers or indirectly from saleyards and feedlots.
- Reduce the cost of having to re-enter NVD information into receiving computer systems and databases.
- Reduce the cost to store and retrieve historical NVDs for auditing, reporting and administrative purposes.
- Provide the buyer with greater visibility of the incoming livestock's declaration details before the stock arrives, enabling more efficient management of incoming animals.
- Ensure the latest versions of vendor declarations are being used by consignors/sellers (using licensed eNVD software), thereby always meeting market requirements.
- Potential to leverage the NLIS platform to further extend improvements to industry integrity and traceability of vendor declarations and animal movements (e.g. MSA, NFAS, PCAS, commodity declarations, health statements, RFID traceability). This will have the potential to further reduce costs, as well as supporting and lifting the brand equity of Australian red meat locally and abroad.

As best practice, the eNVD system should encourage producers to complete and submit their eNVD before the day of consignment.