

eBale FAQs – “Delivering What the World is Demanding”

What is eBale?

eBale is a technology system that supports the traceability of Australian wool. It includes wool packs that have a unique (matching) QR code and RFID microchip – these are known as eBale packs. To maximise the success of the technology, the QR Code can be read on farm using WoolClip, an electronic wool classing & data App and the RFID is used in commercial warehouse settings.

The eBale technology only carries a unique ID (a string of 24 characters), an example follows:

Unique Tag Id: 3376392D9000008801681505

Fixed Prefix: 3376392D900000

Serial component (unique): 8801681505 (actual number used as the eBale moves along the supply chain)

The last number of the serial component is a check digit (in this example it is 5).

The number may be scanned many times along the wool pipeline, i.e. on farm, freight, warehouse, core-line, dump, shipping, scourer/top maker warehouse and processing line. The key is that the unique number can be linked to the farm data (using WoolClip and broker systems) and is accessible only by those with express permission, viz. grower, broker, exporter, processor. See page 3 for an example of an eBale label.

Will WoolClip replace the paper-based system for wool bales currently in use?

To maximise the benefits of eBale, WoolClip wool classing & data software is necessary. However, eBale is able to be used with the paper based Classer's Specification, with it likely that the Warehouse will scan the bales on entry and link the paper Specification details to that unique ID. It is anticipated that over time, the use of paper-based Classer's Specification will cease.

What are the data privacy risks associated with eBale? How will AWEX protect farmers' data?

All of the eBale data is securely stored using best practice security measures. The data is only provided to the nominated Wool Marketing Organisation, or WoolQ if approved by the grower.

Why is traceability important?

eBale will support the traceability of Australian wool, which is important in marketing, biosecurity and quality assurance. It will help protect Australian wool's global reputation as being the supplier of high quality wool of known provenance.

Has Australia considered how the RFID technology could be used in the case of an exotic animal disease outbreak?

It is likely that an exotic disease outbreak could severely impact trade and having an improved and digital identification system will benefit the industry to resume trade as soon as possible. The Australian wool industry (& all agricultural industries) have been actively pursuing scenario planning should a biosecurity event occur. This exercise, led by WoolProducers and Animal Health Australia, was called Exercise Argonaut.

The details can be found at https://www.sheepcentral.com/wp-content/uploads/2021/01/Exercise-Argonaut_Report.pdf

When is eBale being rolled out?

From July 2023, every wool pack imported into Australia will have an eBale RFID microchip and QR code.

Do all Australian wool growers and warehouses need to use eBales?

Growers and brokers do not have to use eBale. However, there are many growers, brokers and exporter's customers who are demanding it and will use it to improve their record keeping, logistics and wool handling capability and quality assurance.

Is there a transition period for eBale?

eBale wool packs will become commercially available from January 2023, with only eBales imported from July 2023. Wool growers can use up any “non eBale” wool packs. There is no end date for the use of “non-eBale” wool packs. Wool in “non-eBale” wool packs does not have to be repacked into eBales.

Accessing eBale packs

You will need to contact your usual wool pack supplier to request eBale packs, which will be available from 1 January 2023.

AWEX has already received its 1st order for eBales.

Retrofitting “non eBale” wool packs

AWEX has had enquiries from growers and brokers who are interested in adhering the RFID tag (with printed QR Code) to the outside of their “non eBale” wool pack labels – this has been trialled and proven to be successful. The eBale tag adheres best to a clean label on a “non eBale” wool pack.

Given the implementation timeline, it is anticipated that the new eBales will flow through naturally. However, for interested parties, the RFID tag will cost A\$0.80 each (inclusive of GST). If you are interested in purchasing RFID tags to adhere to your “non eBale” packs, please contact AWEX.

What happens if the system goes down?

There is no system to go down *per se*. Each eBale has three methods of unique and matching identification, the RFID itself, along with the QR Code and number printed on the bale label. This means that if; for example, the RFID has been damaged (a very rare event) and can't be read, the same number is on the pack label in two forms. While on farm the QR code is read by a smart phone with the data captured into WoolClip, equally the printed matching number could be typed in manually.

While software programs are involved in the capture of data, the WoolClip software has support in place in case of an issue, and equally other industry software programs are maintained and supported if anything goes wrong.

Is there an added cost for eBales?

The eBale technology costs an additional 60 cents per pack. This is paid for by the pack manufacturer. The WoolClip App that farmers use capture the eBale and enter wool data is free to download and use.

Together, the eBale and WoolClip system will save farmers time and improve information transfer throughout the value chain. The first stage is the direct transfer of the electronic Classer's Specification and NWD information from the farm to the broker.

How is industry helping individual businesses make the change?

AWEX is supporting growers and classers to learn and understand eBale via its extension team. Equally, AWEX's team is actively training growers, classers and brokers to use WoolClip. Support is available 7 days a week.

AWEX is assisting interested brokers/dump to set their warehouses up to be RFID ready. Firstly, this means working with their software providers to set up Application Programming Interfaces (APIs) to facilitate the transfer of wool classing data direct from WoolClip into the broker software. The WoolClip data is transmitted before the wool arrives at the warehouse; it also has error minimising functionality such as no duplicate bales, correct calculation of mulesing status, etc. AWEX is also working with the warehouses and their software providers to enable base RFID functionality, viz. arrival and departure of bales from a store, finding a bale(s) and stocktake.

Does industry support the move?

AWEX has conducted trials over the last 25 years in consultation with and support from the industry. Full implementation of eBale has been welcomed by industry, with leading brokers and exporters as well as local and overseas processors supporting the move. It is expected to deliver significant efficiencies and quality assurance capabilities through the value chain, improve the accuracy of information transfer, and ultimately render the paper-based system unnecessary.

eBale is "Delivering what the world is demanding!"

What about Australia's wool processing customers?

European and Chinese processing mills assisted AWEX to undertake the proving trials of the technology and have since provided their support for the implementation of eBale. As eBale reaches a critical adoption/usage rate (which may differ between companies), they will undertake the necessary software development and hardware purchases to fully utilise the technology. Making a processing mill RFID ready will also be driven by the supply of data from brokers, buyers and dumps.

Who has developed the eBale system?

AWEX seeks to add value for the benefit of its stakeholders by providing services and functions for the effective and efficient trading of wool in Australia. AWEX registers wool pack manufacturers and importers and manages the standard for wool pack production. As part of this role, it invested in the research of the RFID technology to ensure that it offers the best identification systems for Australia's wool bales affording traceability and quality assurance benefits along the pipeline, including in the case of an Exotic Animal Disease outbreak.

Why was eBale developed?

eBale was developed in response to an industry need – to improve the accuracy and the identification of wool bales from farm to store to mill. RFID technology is successfully being used by many industries. The introduction of eBale at this time reflects the availability of suitable and mobile technology along with its price point. Previous iterations of the technology were not suited to the wool industry or were too expensive.

Do other countries have a similar system?

No, it is a world-first. Australian wool enjoys a global reputation for quality and the eBale system will help to protect this point of difference in the market.

How much did the system cost to develop?

AWEX has been funding the research of the eBale project for 25 years, with varying amounts spent along the way as new technologies were trialled. In 2021, AWEX received a 3 year Australian Government Traceability Grant to assist with the integration of eBale into industry.

Implementation Calendar

Date	Action
31 December 2022	Production of current "non eBale" label will cease
1 January 2023	New eBale label & pack production commences
1 July 2023	All wool packs imported into Australia will be eBales.

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