

ELECTRONIC EAR TAGS: WHAT WE KNOW SO FAR

LEGISLATION AND RULES

All sheep and goats born, sold or transferred to a different PIC on or after the 1st January, 2025 will need to have an eID tag. This is because sheep (including newborn lambs) need to be identified when moving between properties and places in this new electronic system.

Western Australia intends on continuing with the year of birth colour system for electronic tags, as well as tagging for sex with tags in specific ears (left - male, right - female). Earmarking will still be optional. The NLIS (National Livestock Identification System) standard for RFID (radio frequency identification) allows for year of birth colours to be used and DPIRD will legislate the requirement. If you already use eID tags make sure they are NLIS accredited, with the compliant year of birth colour and in the correct ear to avoid the need to retag.

eID tags will remove the need for having pink post breeder tags **UNLESS** the original eID tag has fallen out of a purchased sheep. Only then will you need to retag with a pink eID tag. You cannot have multiple eID tags in one animal as each tag signifies a separate animal. This means you can't reuse an eID tag as it is with that sheep for life. You can however use leftover tags. If you ordered 1,000 red eID tags last year (2022) but only use 900 of them, the 100 leftover eID tags can be used in 2030 when red comes around again, or to retag sheep you've bred born in 2022 whose tag has fallen out.

WHAT IS AN EID TAG?

eID is a shortened term used to describe all electronic identification devices. They can individually identify animals because inside each eID tag is an RFID (Radio Frequency Identification) chip. This RFID chip contains a unique number which can be linked to the NLIS ID number printed on the tag. For sheep, the only eID devices are electronic ear tags.

NLIS eID ear tags will come printed with a NLIS ID 16 character code and a RFID microchip inside it. This is the only information the eID tag has. It does not store data.

HOW IS THE NLIS ID NUMBER DERIVED?

- The first 8 characters are the PIC of the property.
- The next 3 characters denote the tag manufacturer, whether the tag breeder (sheep S or goat K) or post breeder (sheep T or goat L) and year of manufacture (= stud year code which is a letter)

- The next 5 characters are a serial number which can be specified when ordering the tag. It can start with a letter if desired.

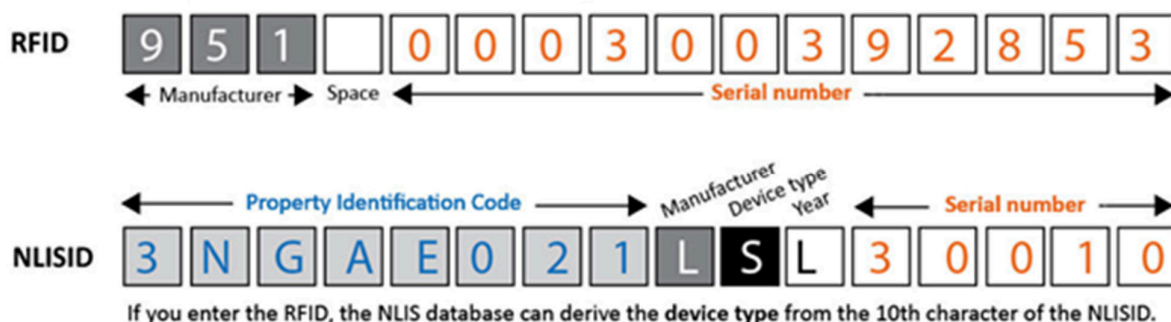


Figure 1 – A sheep 'breeder' RFID ear tag manufactured in 2015. Source <https://www.integritysystems.com.au/identification--traceability/animal-identification/>.

COMMON QUESTIONS

WILL ALL SHEEP ON THE PROPERTY NEED TO BE TAGGED BY 1ST JANUARY, 2025?

No. Older sheep can remain on a property with only a visual tag. But they need to be tagged with an eID tag in order to be sold. DPIRD recommend beginning to use eIDs now to avoid the need to retag later. This saves the cost of buying a visual tag, an eID tag as well as the labour needed to retag. The lead up to 2025 is what DPIRD are labelling a 'transition period', which is now until the 1st January, 2025.

WHAT HAPPENS WHEN BUYING AND SELLING SHEEP AFTER 1ST JANUARY, 2025?

When purchasing or selling sheep through a public auction, the livestock agency in charge of the auction will deal with the transfer of the animals onto the new PIC in the NLIS database. Public auctions include saleyards, clearing sales and ram sales.

For any other sales, the receiver of the livestock is required to update the NLIS database within 48 hours and scan in the animals coming onto their PIC. You can request that the vendor or your livestock agent complete this process. You can also ask for help at your local CRC. DPIRD is planning to have an eID reader stationed at each centre and a couple staff members trained in updating the NLIS Database.

Lambs being sold direct to slaughter will need to be fitted with an eID tag. There are no exceptions to this ruling for sheep producers.

WHAT DO I DO WHEN SELLING SHEEP I'VE BRED WITH NO EID TAG FITTED TO THEM?

Will you sell the sheep before 1st January, 2025?

- Yes – It doesn't need or require an eID tag.
- No – Requires an eID tag in order to be sold on and after 1st January, 2025. You will have to retag them.

Do **NOT** use a pink eID tag when retagging these sheep to sell. That colour is for post breeder identification only. When you retag the sheep, the eID must go next to the visual tag. The visual tag will remain in place to provide the year of birth information. See an example below of a ewe with a red visual NLIS tag; the eID tag (yellow in this example) will go next to the red visual tag.

It is now confirmed via information DPIRD have released on their eID FAQ handout that yellow will be the colour used to tag older stock with an eID tag. This is if they have no electronic tag when being sold after the 1st January, 2025. Please refer to the image below on how you will need to tag sheep with this yellow eID tag.



Figure 2 – An example of a red (2022 drop) tag ewe with a yellow eID tag.

WHY ONE SPECIFIC COLOUR FOR OLDER STOCK?

Supply issues on the manufacturers end. It is easier for a tag manufacturer to make, and a producer to order, a lot of one specific colour at a time and use these all up in one go rather than ordering and making lots of eID tags in multiple colours.

You can still order and use the year of birth colours for older stock. There is nothing currently stopping you from doing so.

WHAT DO I DO IF I HAVE PURCHASED SHEEP WITH EID TAGS ALREADY?

If you have purchased sheep with an eID tag currently fitted to them do not tag with a pink eID tag. As stated earlier this is because a sheep can only have **ONE** eID device on them at a time. However, as current legislation still requires you to identify those sheep that were not bred on your property, you need to tag them with a pink NLIS visual post breeder tag. The change to not requiring pink post breeder tags will occur on 1st January, 2025.

Log the transfer of these sheep in the NLIS database as soon as possible, but check your agent hasn't already done this. Become familiar with how to use the NLIS website.

WHAT DO I DO WHEN BUYING SHEEP I HAVEN'T BRED (POST BREEDER) WITH NO EID TAG FITTED TO THEM?

Will you sell them before 1st January, 2025?

- Yes – Don't tag them with a pink eID tag, use a pink visual tag.
- No – Tag them with a pink eID tag. Current legislation still requires you to have a pink tag identifying them as post breeder sheep. It will save you having to retag them with an eID tag later.
 - Make sure the transfer of these sheep from their previous property to yours is logged in the NLIS database.







WHAT HAPPENS IF I DON'T USE A PINK EID NOW, BUT I SELL THEM AFTER 2025?

You will need to retag them with a pink eID tag. The sheep will require an eID tag to be sold, but will still need to be identified as not being bred on your property.






NLIS ACCREDITED TAGS

The NLIS authority has an accreditation process for visual and eID tags before they can be used officially in their traceability system. This list for fully accredited eID tags is current as of September, 2022. Tags undergo three years of infield testing to gain fully accredited status. Tags on conditional status are undergoing the accreditation process, but have not completed three years of infield testing. Tags can cost up to \$2.00 each depending on the manufacturer.

LIST OF FULLY ACCREDITED EID TAGS

RFID	Allflex Lightweight		Allflex
RFID	Allflex Rapid		Allflex
RFID	Leader Leadertronic		Leader Products
RFID	Leader Multitronic		Leader Products
RFID	Shearwell ASET		Shearwell
RFID	Datamars Goat Legband <i>Only trialed in Australia on Saanen and Anglo-Nubian goats</i>		Zee Tags

LIST OF TAGS WITH CONDITIONALLY ACCREDITED EID TAGS

Visual & RFID	Zee Tags Tagfaster RFID and Visual		Zee Tags
Visual & RFID	Zee Tags FET RFID and Visual		Zee Tags
RFID	Enduro Tags Combo 2		Enduro Tags
Visual & RFID	Datamars TagFaster (with TI transponder)		Datamars Australia
RFID	Leader Multipin (Red Cap)		Leader Products

EID TAG BUCKET FILES

If requested when ordering eID tags, tag manufacturers will send you a tag bucket file after purchasing eID tags. Tag bucket files can also be downloaded from the NLIS database, as the tag manufacturer is required to upload it into the NLIS traceability system.

What are they?

- A Tag Bucket File is a Comma Separated Values (CSV) file you upload into eID software, which is used to link the RFID number inside the eID tag to the visual number printed on the outside of the tag.
- This programmes any eID reader and eID device in your system to display the visual number printed on the eID tag, rather than the RFID number.
- You can edit the files in Microsoft Excel

If you choose to not invest at all into eID equipment and software, you will not need a tag bucket file. If you are planning on investing in eID equipment, you will need to request the tag bucket file of any sheep you purchase to programme your equipment to read their visual tag numbers. The vendor, livestock agent or NLIS database should have a copy of it for you.

EID EQUIPMENT AND INFRASTRUCTURE

DPIRD have stated producers will not be required to purchase any equipment for reading tags if they do not want to. This is because any sheep purchased or sold through a public auction will be scanned at the saleyard and agents will transfer them to the new PIC.

For any private sales or internal transfers between different PICs, an eID wand will be available to borrow at Community Resource Centres (CRC). DPIRD are planning on training staff members on how to use the NLIS database.

If you would like to purchase eID equipment and tools there is a lot out there to investigate. To keep it simple, an eID wand or panel reader is all you need. To become more technical, you can invest in weigh scales, auto drafters or barcode readers (for fleece related tests).

The choice of how much you want to utilise and invest in eID equipment and tools is completely up to you.



Figure 3 – An example of various eID devices.

CAN AN EID READER FROM ONE BRAND (E.G. GALLAGHER) READ AND SCAN ANY NLIS EID TAG FROM A DIFFERENT BRAND (E.G. SHEARWELL)?

Yes, so long as you have the tag bucket file uploaded to your eID reader device for the animals you need to scan.

WHAT DATA CAN BE COLLECTED?

Anything you want, but if you want to collect a wide range of data, learn how to make it clear, straightforward and simple from the start. Identify the traits and codes you want to use and stick with the same ones each year. Don't add year prefixes or suffixes to them (e.g. 23CFW, FD22 or SS23) because it is already identified. This will make data management and analysis easier. Collect trait information according to the ASBV, age stages and trait names.

The most commonly collected information is:

- Clean Fleece Weight (CFW), Fibre Diameter (FD) and Staple Strength (SS)
- Weight (WT) – Weaner (W), Hogget (H) and Adult (A)
- Eye Muscle Depth (EMD), Fat Cover (FAT)
- Nutrition
- Parentage
- Body condition Scores, Fibre Pigmentation (FPIG), Cull/Keep

When you sell sheep, it will be your choice to pass on any information you collect to the buyer. The buyer is not entitled to it. No information you collect will be stored on the tag. Only the RFID number is inside the tag. The tag bucket file is used to programme eID devices to trait information.

EID SOFTWARE

Most companies which provide eID readers come with their own software to extract and interpret the data. These include the likes of Tru-Test, Shearwell, Gallagher and Allflex. This simple read and extract software is what most producers would need to use for basic eID management.

However, if you want to collect a wider range of information and use the data in more creative ways, there are specific RFID based software companies like Sapien Technology who provide the KoolPerform and KoolCollect programmes and Breed Elite. The purpose of these companies is to provide producers with sophisticated, but easy, data management and analysis. Some of these come with their own inhouse eID scanners, auto drafters and scales you will be required to use.

With any data management software, be it simple or professional, you will have to pay an annual subscription fee.



Figure 4 – An example of various eID software.