

# Tech Tips: Animal identification and the NLIS Database



Under the National Livestock Identification System (NLIS), all **cattle** in Australia, all **sheep and goats** born after 1 January 2025, and all sheep and goats in Victoria are required to be identified with an individual electronic identification device. These are also known as an **RFIDs or eIDs**. The use of an eID device (tag) allows the recording of individual stock movements on the NLIS database so animals can be effectively traced throughout the supply chain.

## An eID device has two numbers assigned to it:

The **Radio Frequency Identification (RFID) number** is encoded on the microchip inside the eID device. It is globally unique and can only be read by an eID scanner. Its sequence includes the manufacturer's code and the device number.

### RFID (coded onto eID – read with a scanner):

9	0	0	0	1	2	3	4	5	6	7	8	9	0	1
Manufacturer code			Space	Unique serial number										

An **NLIS ID** number is printed on the outside of the device and includes the Property Identification Code (PIC), manufacturer code, device type or species code, the year of manufacture, and a serial number.

Either the RFID number **OR** the NLIS ID number can be used to record movements of individual livestock on the NLIS database.

## Devices and your PIC

A PIC is an eight-character code allocated by your state or territory department of primary industries. It is required to move livestock on and off a property and forms the basis of Australia's food safety and traceability programs.

When you order an eID device, the supplier verifies you can purchase devices for that PIC, before encoding the microchips and printing the devices. The RFID and NLIS ID numbers are linked and a list is uploaded to the NLIS database against your PIC, assigning those devices to your PIC. The devices will then sit on your PIC in the database until they are moved off or are marked as deceased or deactivated.

## Ordering devices

To order eID devices, contact your state or territory department of primary industries, a reseller or the manufacturer directly.

Ensure you have your PIC and choose an approved NLIS device to best suit your climate and environment. When ordering eID devices please make sure you specify if they are for sheep or goats. This will ensure that when the manufacturer uploads the devices into the NLIS database they will be coded for the correct species.

For a full list of NLIS approved devices, visit the ISC website:  
[integritysystems.com.au/identification--traceability/animal-identification/](http://integritysystems.com.au/identification--traceability/animal-identification/)

For more NLIS how-to guides or further assistance: [www.integritysystems.com.au/nlis](http://www.integritysystems.com.au/nlis) | 1800 683 111

The **NLIS ID** is the number you will see on the outside of the coded – it follows this format:

A	B	1	2	3	4	5	6	X	K	V	0	0	0	0	1
Property Identification Code (PIC)								Manufacturer	Species	Year	Serial number				

## PIC

The first 8 characters of the NLIS ID are your PIC. These are some examples of PICs for each state/territory:

NA123456	New South Wales
3ABC0123	Victoria
QABC0123	Queensland
SB123456	South Australia
TABC0123	Northern Territory
WABU0123	Western Australia
MABC0123	Tasmania

## Manufacturer code:

The manufacturer code is assigned automatically:

Allflex	X
Datamars	M
Z Tags	Z
Enduro	R
Leader	L
Shearwell	A
Fofia	F

## Species

The species code identifies the **animal** and whether they were **born on your property or introduced**. Sheep devices are coded for sheep, goat devices for goats, etc.

**NLIS breeder devices** are applied to livestock when they are on their **property of birth**. NLIS breeder devices can be yellow or the year of birth colour. Year of birth colour devices are mandatory in Western Australia and recommended in other states.

**NLIS post-breeder devices** are applied to livestock on any other property where an animal does not already

have a device applied. Post-breeder devices are only available in pink for sheep, goats and South American camelids, and orange for cattle.

Once an animal is tagged, the device should remain with the animal for its lifetime. If a device stops working or falls out, the animal needs to be re-tagged. If the animal is on its property of birth, it can be re-tagged with a breeder device and if it is not on the property of birth it must be tagged with a post-breeder device.

SPECIES	DEVICE	CODE	COLOUR
SHEEP	Breeder	S	Yellow or a year of birth colour
	Post-breeder	T	Pink
GOATS	Breeder	K	Yellow or a year of birth colour
	Post-breeder	L	Pink
ALPACA / LLAMA	Breeder	A	Yellow or a year of birth colour
	Post-breeder	D	Pink
CATTLE	Breeder	B	White
	Breeder bolus	C	White
	Post-breeder	E	Orange
	Post-breeder bolus	F	Orange

COLOUR	YEAR	YEAR
Yellow	2021	2029
Red	2022	2030
Sky blue	2023	2031
Black	2024	2032
White	2025	2033
Orange	2026	2034
Light green	2027	2035
Purple	2028	2036

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## Year

This code identifies the year the device was manufactured and is automatically assigned. This doesn't have any impact on when the device can be used.

2023	U	2031	C
2024	V	2032	D
2025	W	2033	E
2026	X	2034	F
2027	Y	2035	G
2028	Z	2036	H
2029	A	2037	J*
2030	B	2038	K

*\*The letters I and O cannot be used due to confusion with the numbers one (1) and zero (0).*

## Serial number

The serial number is the last 5 characters printed on the outside of the NLIS device, and can be 5 digits, or a letter and 4 digits, as requested by the producer when ordering devices.

### Approved Devices

An eID device must obtain NLIS approval from Integrity Systems Company before it can be used. Approval requirements are contained in the NLIS Animal Identification Technology (NLIS AIT) Requirements, which detail minimum mandatory specifications for devices. Devices may have a **conditional or full approval status**.

Devices with conditional approval are still under trial but can be sold commercially and used under the NLIS. Full approval may be granted to a device at the conclusion of field trials.



For more information on animal identification or to access the device feedback form, see here: [integritysystems.com.au/identification--traceability/animal-identification/](https://integritysystems.com.au/identification--traceability/animal-identification/)

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