



National Livestock
Identification System
Sheep & Goats

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NLIS Sheep & Goats National Livestock Identification System

Standard for visual tags

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1 Introduction

- 1.1 The National Livestock Identification System (NLIS) for sheep and goats, known as NLIS (Sheep & Goats) is a 'whole of life' system for tracing animals from their properties of birth until they die or are slaughtered, for food safety, biosecurity and market access purposes. The program was introduced nationally in 2006 by the sheep and goat industries, with the support of State, Territory and Federal Governments.
- 1.2 The **Visual Tag Standard** details minimum mandatory specifications for visual devices supplied to producers for use under NLIS (Sheep & Goats). This Standard does not apply to approved radio-frequency identification devices. A separate standard applies for RFIDs, a copy of which can be obtained from ISC.
- 1.3 The NLIS Standards Committee is appointed by SAFEMEAT to establish standards for devices supplied for use under the NLIS programs. The Committee makes recommendations to ISC on which devices should receive accreditation, be eligible to carry the NLIS logo and be supplied to producers for livestock identification.
- 1.4 ISC requires that companies with devices recommended for accreditation sign a licence agreement before commencing the production of devices. A copy of the licence agreement is available from ISC.
- 1.5 Suppliers seeking NLIS accreditation for devices must supply evidence to demonstrate that their device complies with the relevant Standard.
- 1.6 The Committee may recommend devices that they judge as meeting the requirements of the Visual tag standard when used to identify **sheep**. Devices may not perform as well on **goats** but where the Committee believes that a tag is suitable for identifying goats, the Committee may approve the inclusion of a statement to this effect on the packaging issued with devices and in the supplier's advertising material.
- 1.7 Accredited devices may be applied to either ear, unless a State has a particular requirement.
- 1.8 ISC may amend this document at any time. NLIS logo licensees, and applicants with devices under assessment, will be required to comply with the requirements of the new version of this document within a time specified by ISC.

2 Levels of accreditation

There are several “levels” of accreditation which are designed to facilitate the trialling of a device and its commercial supply when certain performance criteria are met.

- a) **Experimental accreditation:** Authorises the conduct of approved field trials using a limited number of devices. This accreditation means that the devices used in the trial may carry the NLIS logo and are recognised as official identification devices for regulatory purposes. It is important because it means that any livestock that move off the property do not require devices to be reapplied. Experimental accreditation is subject to ongoing compliance with the requirements of the field trial, this Standard and the NLIS logo licence agreement.
- b) **Conditional accreditation:** May be granted after six months of a three year field trial, and authorises the commercial supply of an approved device when a device has been granted accreditation but is still being assessed within the field trial. Conditional accreditation is subject to ongoing compliance with the requirements of the field trial, this Standard and the NLIS logo licence agreement.
- c) **Full accreditation:** Is granted when a device has complied with the three year field trial performances requirements. The trial period may be extended by ISC. Full accreditation is subject to ongoing compliance with the NLIS logo licence agreement.

The device covers the tag, application tool, packaging and supporting instructions, not individual components.

To maintain accreditation, any proposed modification to an accredited “device” (other than packaging) requires review and approval by ISC. ISC, with advice from the NLIS Standards Committee, will assess whether the modified device will maintain accreditation and may, at its discretion, require additional testing or trialling of the modified device. Use of a modified device prior to approval by ISC will be a breach of this Standard.

3 Tag characteristics

3.1 Description

- 3.1.1 Sheep and farmed goats are identified on the property of birth with a permanent breeder ear tag printed with the Property Identification Code (PIC) of the breeder's property (or a 3-character brand in Western Australia).
- 3.1.2 Tags to be supplied to producers under NLIS (Sheep & Goats) are classified as:
 - a) Breeder tags (applied while animals are on their property of birth) and
 - b) Post-breeder tags (applied to untagged animals that have moved from their property of birth)
- 3.1.3 Breeder and post-breeder visual tags must be in the form of a plastic ear tag.

3.2 Printing on tag

- 3.2.1 States/Territories allocate Property Identification Codes (PICs) to sheep and goat producing properties. The PICs are identical to those issued to cattle producing properties. Properties with sheep, goats and cattle use the same PIC for all species.
- 3.2.2 The following information shall be printed on the tag:
 - (a) The 8-character **PIC** (or a 3-character brand in Western Australia).
 - (b) The option of an alphanumeric **serial number**.
 - (c) The **NLIS logo** (which may be printed, engraved or moulded) and if space permits, additional information to identify the property (such as a brand name or property name) or comply with industry or regulatory requirements (e.g. symbols V, T, or S). Where tags are printed with "V", "T", or "S" the application instructions must state that it is the responsibility of the person applying the tag to ensure that the tags are only applied to complying animals.
- 3.2.3 One side of the tag shall include the PIC. Additional information that facilitates identification of the property or meets industry or regulatory requirements such as brand, property name, or symbols V (vaccinated with Gudair vaccine), T (terminal lamb to be slaughtered before first permanent teeth cut), or S (vaccinated for scabby mouth) may be included anywhere on the tag, provided that the readability of the PIC is not compromised, in accordance with the Standard. The NLIS logo may be printed on either side of the tag, including on the curve of a one piece tag. No other information may be printed on the curve of the tag.
- 3.2.4 For one-piece ear tags, the **PIC** and **serial number** may be printed on one side of the tag, or the PIC may be printed on one side and the **serial number** on the other side.
- 3.2.5 For swing tags, the NLIS logo and PIC must be on the same component of the tag.
- 3.2.6 For two-piece ear tags, the serial number must be printed on the female component, with the option for the serial number to be duplicated on the male pin. Where this option is exercised, the packaging must be designed to prevent any disassociation of the serial numbers on the female component of the tag and on the male pin.

3.3 Tag colour

3.3.1 It is strongly recommended that suppliers supply visual breeder tags according to the colour of the year system. The colours rotate in 8-year cycles. Post-breeder tags must be pink, and pink tags may only be used for the purpose of post-breeder tags. The colour pink may not be used for the purpose of identification with a breeder tag.

Figure 2 – Colour of year system

Year	Tag colour	Year	Tag colour
2008	Black	2016	Black
2009	White	2017	White
2010	Orange	2018	Orange
2011	Light green	2019	Light green
2012	Purple	2020	Purple
2013	Yellow	2021	Yellow
2014	Red	2022	Red
2015	Sky blue	2023	Sky blue

Any year Post-breeder tags must be pink

Figure 1 – Visual tag examples



Breeder tag



Post-breeder tag

4 Tag performance specifications

4.1 Tag loss rates

- 4.1.1 Performance is measured against the NLIS (Sheep & Goats) **Protocol for trials of visual tags**.
- 4.1.2 NLIS (Sheep & Goats) approved devices are intended to remain attached to sheep and goats until they die or are slaughtered.
- 4.1.3 The physical loss of devices from livestock on typical Australian sheepmeat, wool and goat properties must not exceed 3.5% within 3 years under normal field conditions.
- 4.1.4 Failure at installation due to tag breakage or applicator failure shall not exceed 2%.
- 4.1.5 A device is approved as a complete unit, and components cannot be substituted. To maximise tag retention, a female component must only be used with a pin approved for use with the device.

4.2 Safety and animal welfare

- 4.2.1 Once an animal is restrained, installation of devices shall take no more than 20 seconds per animal, pose no undue risk to the operator and cause minimal discomfort or danger to the animal.
- 4.2.2 Tags should not damage the skin, nor adversely affect the health and welfare of tagged sheep and goats. If the device is an ear tag, the supplier must specify on the accompanying directions for use whether any precautions need to be taken during application to prevent the ears of animals being ripped.
- 4.2.3 Tags shall not be capable of causing chemical contamination of meat or edible offal.

4.3 Physical deterioration

- 4.3.1 There should be no apparent physical deterioration in tags due to ultraviolet radiation, rain, heat and cold or other environmental influences within three years of application to sheep or goats under Australian conditions.
- 4.3.2 After three years, printing on at least 95 % of tags (includes an NLIS logo that may be engraved or moulded) shall be readable at a distance of 0.75 metres under normal daylight conditions while attached to live animals.

5 Supply of accredited tags

5.1 State/Territory regulations

- 5.1.1 NLIS accredited tags may only be supplied to producers in accordance with State/Territory legislation.
- 5.1.2 If required by State/Territory authorities, **before** production and dispatch of tags to producers, suppliers must:
 - (a) check the PIC supplied by the producer against the name and address details on the State/Territory PIC register.
 - (b) transmit to State/Territory databases in electronic form information about tag orders, including producer's name and address, date each order was dispatched, PIC and serial numbers (if printed on the tags) and the total number of tags supplied.

5.2 Quality systems

- 5.2.1 Suppliers must have an auditable production system, which as far as is practical eliminates errors associated with the printing of visual information on tags. Where producers place tag orders directly, suppliers shall apply an algorithm validation procedure to check the validity of each producer's PIC before printing on devices.
- 5.2.2 Suppliers must have a procedure for recall and replacement of defective products. Suppliers must alert the NLIS Standards Committee **within 10 working days** of all complaints from producers, processors or stock agents about tag quality, performance and reliability. A defect resolution report may be supplied if available.
- 5.2.3 Suppliers must maintain, for at least **seven years**, a copy of producer orders, the date each order was dispatched and the details regarding the PIC and serial numbers for each device. Records relating to orders and dispatch details may be kept in electronic form if backup systems are in place.
- 5.2.4 **Within 12 months** of commercial supply of the tag, suppliers must attain ISO 9001 accreditation for the production and supply of breeder and post-breeder tags.
- 5.2.5 Suppliers of two-piece tags must have **recording** systems to ensure that batches of male pins can be accurately correlated with female components if the male pin fails.

6 Auditing and reporting

- 6.1 Before ISC enters into an **NLIS Logo Licence Agreement** with a supplier, the supplier must demonstrate that the visual tag complies with the requirements of this Standard, by means of an initial audit.
- 6.2 After the NLIS Logo Licence Agreement ISC is signed by both parties, audits will be conducted at a frequency to be determined by ISC – at least annually.
- 6.3 A copy of this **Visual Tag Standard** and any non-conformance issues reported by ISC or a State/Territory or Federal Government authority in the preceding 12- months must be supplied to the licensee's independent auditor before the annual audit.
- 6.4 **Within four weeks** of receipt of the independent auditor's **Annual Report** relating to production and supply of accredited devices, a copy must be submitted to ISC.
- 6.5 ISC may schedule and conduct additional audits at the supplier's premises, or any premises which the supplier uses:
 - (a) Where ISC considers that such audits are required to verify compliance by the supplier with this Visual Tag Standard;
 - (b) If an audit report indicates that the supplier is not complying with or may not be complying with the requirements of this Standard; or
 - (c) In any other circumstances that ISC considers appropriate.
- 6.6 Audits may be undertaken without prior notice to the supplier.
- 6.7 Where a supplier's manufacturing and supply operations are ISO accredited under the 9001:2000 Standard, ISC may, at its discretion, accept an ISO audit instead of conducting its own audit.
- 6.8 The auditor will prepare an audit report and provide a copy of the report for signature during an exit meeting with the Supplier.
- 6.9 The supplier must implement any corrective or preventative actions which the Auditor or ISC specifies.
- 6.10 The supplier must pay all costs, fees and expenses associated with the audits.

Appendices

A.1 – Glossary of terms

Note: Any reference to sheep and goats includes lambs and kids.

Term	Definition
Auditor	ISC or a person or organisation approved by ISC to conduct audits.
Colour of year system	A tagging system that visually denotes the age of the sheep or goats by eight colours that rotate through a defined sequence as described in Section 3.3 of the NLIS (Sheep & Goats) Visual tag standard.
Device	An ear tag that is attached sheep or goats and which provides a means of identifying them.
Ear tag	A device that is attached to the ear of sheep or goats and which provides a means of identifying them.
Knackery	Premises operating under State/Territory law where livestock and carcasses are processed other than for human consumption.
National Livestock Identification System (NLIS)	Australia's national system for identification and tracing of animals to their property of birth and last property of residence.
NLIS logo	The logo used to identify tags endorsed for use under NLIS (Cattle) and NLIS (Sheep & Goats) programs.
ISC	The subsidiary of Meat & Livestock Australia which is responsible for NLIS database operations and associated support services, which underpin the delivery of the NLIS program. This includes database development and hosting, support services and device accreditation.
NLIS Standards Committee	The committee responsible for NLIS Device Standards and Protocols for trials of new devices for which accreditation is sought.
Permanent identification tag	A tag that is permanently attached to sheep or goats on the property of birth or at a subsequent property and which may not be legally removed until the sheep or goats are slaughtered.
Processor	A person, organisation or company actively engaged in the slaughter of sheep or goats.

Term	Definition
Producer	A person, organisation or company actively engaged in the raising of sheep or goats (including fibre, meat and dairy animals) for subsequent sale. Includes feedlot operators.
Property Identification Code (PIC)	The 8-character alphanumeric code for a property as allocated by the relevant State or Territory authority (or 3-character brand in Western Australia).
RFID breeder tag	An electronic RFID ear tag to identify animals still on their property of birth.
RFID post-breeder tag	An electronic RFID ear tag to identify animals no longer on the property of birth, and introduced animals that have lost their original breeder tag. A post-breeder ear tag for sheep or goats must be predominantly pink, including the male pin.
Supplier	The entity holding the NLIS (Sheep & Goats) licence with ISC.
Vendor	A person, organisation or company selling an animal.
Visual breeder tag	An ear tag used to identify sheep still on their property of birth (origin). Details printed on the tag can be read visually.
Visual post-breeder tag	A tag applied to sheep or goats no longer on the property on which they were born or to animals consigned to a saleyard or abattoir that have lost their breeder tag. Where specified under State/Territory legislation, such tags may double as a transaction tag for sheep and goats consigned to a saleyard or abattoir where the consignment consists of animals originating from different properties as defined by their Property Identification Codes (PIC). In this instance such tags will identify the last property of residency.