

# Terms of reference

## Animal Wellbeing & Biosecurity Investment Call

### Advancing early on-farm detection and real time surveillance

#### Summary

The Australian red meat industry, encompassing cattle, sheep and goat, generated \$77.1 billion in turnover and \$14.3 billion in exports in 2023–2024, supporting over 460,000 jobs nationwide. The industry’s success depends on a well-functioning biosecurity system that enables rapid detection, accurate traceability, and timely response to emerging threats. This Terms of Reference (TOR) seeks to drive a **step-change in early on-farm detection and real-time surveillance** through targeted, measurable and scalable interventions that improve the quality, integrity and usability of traceability data and strengthen system-wide biosecurity performance.

#### Purpose and Background

Effective biosecurity response and market assurance depend on accurate, timely and complete traceability data. However, the domestic red meat supply chain is currently constrained by inconsistent data quality, fragmented systems, variable compliance, and limited integration across platforms. These issues are not purely technical. They reflect a combination of behavioural, operational and system-level challenges, including inconsistent data entry practices, low perceived value of compliance, and limited alignment between systems and real-world workflows. As a result, traceability systems often fail at the point where they are most needed, during biosecurity events, where incomplete or inaccurate data leads to delays, increased investigation burden, and reduced confidence in decision-making.

While the National Livestock Identification System (NLIS) and the ongoing Database Uplift Project provide a critical foundation, further RD&A investment is required to ensure that traceability systems deliver practical value. This includes addressing root causes of poor data quality, improving system usability and integration, and enabling data to be used effectively for early detection and real-time surveillance.

Importantly, improvements in surveillance capability must be understood as part of a broader system. Enhanced detection and data visibility will only deliver value if they are linked to improved decision-making, workforce capability, and adoption of appropriate responses. This creates a direct linkage with earlier investment areas focused on adoption (Opportunity 1) and workforce capability (Opportunity 2).

## Expected outcome

The outcome of this initiative is a **measurable improvement in early detection and real-time surveillance capability across the red meat supply chain**, supported by high-quality, integrated and usable traceability data. This includes faster and more accurate identification of animal movements and exposure pathways, reduced investigation burden during biosecurity incidents, improved decision-making, and increased confidence in system performance.

## Definition of Impact (Mandatory Requirement)

All proposals must clearly define and quantify the impact they intend to deliver. This includes demonstrating how improvements in data quality, integration or compliance will translate into faster detection, improved surveillance capability, or more effective responses to biosecurity threats. Biosecurity threats may include potential exotic disease outbreaks (such as FMD or LSD) as well as endemic or current threats (e.g. weeds, feral pests etc). Proposals must articulate how impact will be measured, including baseline performance, expected improvement in key metrics such as data completeness, timeliness, traceability accuracy, or response time, and the extent to which improvements can be attributed to the intervention.

Proposals that do not demonstrate a clear pathway from data improvement to surveillance and decision-making outcomes will not be considered competitive.

## Scope

MLA is calling for applications for [MDC-funded projects](#) that include RD&A and enabling activities that improve traceability, surveillance and early detection through better data quality, system integration and compliance across the domestic red meat supply chain.

The scope will encompass:

- On-farm, saleyard, transport, processing and private transaction stages of the supply chain.
- Digital systems, databases and platforms that support livestock identification, movement recording and traceability.
- Data quality, governance and transfer processes across jurisdictions and system users.
- Education and capability-building activities that improve compliance and data integrity.

The initiative will build on existing investments, including the NLIS Database Uplift Project, and focus on complementary actions that improve system performance rather than duplicating existing system upgrades.

Project proposals that clearly demonstrate meaningful engagement and consultation with producers, a clear understanding of ISC and its role as well as the NLIS Database Uplift Project, will be favourably assessed.

## Proposed activities

Applicants should clearly define the **outputs** (e.g. tools, knowledge products, technologies, systems, recommendations) created by the project and describe the attributable **outcomes** and **impacts** for producers and the broader red meat industry.

Projects should address one or more of the following:

### 1 Understanding Traceability Inefficiencies and Risks

- Quantify and characterise data quality issues across the domestic supply chain, including unlinked or “ghost” eID tags, inaccurate PIC attribution, and missing movement records.
- Identify high risk points, species, production systems or transaction types where traceability is weakest.

### 2 Improving Data Quality and Integration

- Investigate methods to improve consistency and accuracy of data capture, entry and validation across systems.
- Identify opportunities to better integrate NLIS with on farm production systems, saleyard, transport and processing platforms.
- Support improved alignment between PIC registration, identifiers and animal movement records.

### 3 Advancing Early Detection and Real-Time Surveillance

- Explore how improved traceability and data flows can support near-real-time surveillance and early detection of abnormal events.
- Identify mechanisms to improve data accessibility, sharing and analysis for biosecurity decision-making during routine operations and emergencies.

### 4 Compliance and Capability Building (Opp 1 linkage)

- Design and deliver (via pilot programs) targeted education and extension initiatives to address noncompliance and data quality issues, with a focus on smaller producers, private transactions and complex production systems on a limited scale.
- Improve understanding of traceability obligations, shared responsibility and the role of accurate data in biosecurity response.

### 5 Governance, Assurance and Continuous Improvement

- Identify system governance or process improvements that support consistent data management across jurisdictions.
- Establish feedback loops to inform ongoing system improvement and investment prioritisation.

### 6 Monitoring and Evaluation

- Measure improvements in data quality, system usability and traceability performance.
- Capture lessons to inform future investment in surveillance, traceability and biosecurity systems.
- All projects **that deliver attributable adoption and impact (category 1)** must include a robust monitoring, evaluation and reporting (MER) framework that captures not only outputs, but outcomes and impact. Impacts should demonstrate producer engagement, practice change and benefit to production businesses and the broader industry. This

includes baseline measurement, clear success metrics, and where feasible, approaches to attribute observed changes to the project interventions. The MER plan will be a requirement of Milestone 1 if the project is successful, and applicants should ensure adequate budget allocation for MER activities.

The [MLA Triple Bottom Line Evaluation Framework](#) and guidelines are available on MLA's web site and must be used for the above MER, should your application be successful.

## Project duration and timing

A maximum project duration of approximately 48 months is anticipated. Proposals should clearly outline key milestones that clearly and appropriately justify the duration of the project.

## Resources Required

Proposals must include details of all resources required to complete the project, including personnel, expertise, infrastructure, operating costs and total budget. Co-investment and in-kind contributions should be clearly identified.

## Important information and selection criteria

Proposals will be assessed against criteria that may include:

- Clear articulation of how improved traceability supports early detection and biosecurity decision-making
- Focus on domestic supply chain biosecurity and market assurance outcomes
- System-level thinking rather than isolated or technical fixes
- Clear understanding of data quality issues (e.g. missing data, inaccurate PICs, unlinked/ghost eIDs)
- Insight into where traceability breaks down (e.g. private sales, multi-property operations, post-farmgate)
- Realistic appreciation of jurisdictional variation and compliance challenges
- Evidence-based problem definition (not assumptions)
- Practical approaches to improving data capture, validation and transfer
- Integration (or clear complementarity) with existing systems such as NLIS and supply chain platforms
- Solutions that are scalable, interoperable and user-centred
- Clear linkage between improved traceability and surveillance outcomes
- Potential to support near-real-time data visibility, analytics or alerts
- Reduction in investigation burden during biosecurity events
- Improved accuracy and speed of decision-making
- Recognition that poor data quality is often behavioural, not just technical
- Targeted education or extension to improve compliance and data accuracy
- Feasibility and value for money.
- Strength of producer engagement and adoption approach
- Capability and track record of the project team.

The successful project will be funded by the [MLA Donor Company \(MDC\)](#) funding model. The successful applicant will be required to enter into an umbrella research agreement with MLA, as outlined in the request for tender documentation.

## Deadline for submissions

Preliminary proposals must be received by **MLA before 11.59pm (NSW time) Monday 22 June 2026 and must not be more than 8 pages in length**. Demonstration of team capability may be added as an appendix. **Late proposals will not be accepted.**

Applicants should review MLA's [Project application guidelines and forms](#) web page and the [MLA Project Funding Application Guidelines](#) before completing their preliminary project application.

Use the [MLA preliminary project funding application](#) to submit proposals electronically to MLA at [projectcall@mla.com.au](mailto:projectcall@mla.com.au) and cc [m Laurence@mla.com.au](mailto:m Laurence@mla.com.au).

Preliminary Proposals will be acknowledged and recorded on the MLA project information system.

Applicants will be advised in writing if they will be invited to submit [a detailed funding application](#) for consideration by 14 July 2026. Applicants which are not successful will be advised in writing by 14 July 2026.

## Further Information

If you have questions about these terms of reference, contact:

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