



Implementation of Virtual Fencing in NSW

Submission of the
Australian Veterinary Association Ltd

August 2025

About the Australian Veterinary Association (AVA)

The AVA is the peak professional body representing veterinary professionals and students across Australia. For more than 100 years we have been the united voice of the veterinary profession.

Veterinarians are among Australia's most trusted and respected professionals, dedicated to safeguarding animal health and welfare and supporting the communities they live in.

Our vision and purpose

Vision *A thriving veterinary profession*

Purpose *Building a vibrant future for veterinary professionals.*

At the AVA we champion the veterinary community, advance professional excellence, foster connectivity, and deliver exceptional member experiences to achieve our vision of a thriving profession.

Essential role of the veterinary profession

Veterinary services are essential to Australia's animal health, food security, and economy. They help secure Australia's animal health and livestock supply chain, protecting hundreds of thousands of jobs and easing cost of living pressures through a safe and reliable food supply.

Beyond agriculture, veterinarians support companion animals and their owners, strengthening the human-animal bond and promoting the associated mental and physical health benefits of pet ownership. Animals are not just a part of the Australian way of life; they are deeply embedded in it - socially, culturally, environmentally, and economically, and veterinarians are an essential part of every vibrant Australian community.

Veterinarians play a pivotal role in maintaining the social licence of animal industries, ensuring animal health and welfare meets community expectations. Like human healthcare and education, veterinary services provide both private benefits to individuals and critical public benefits to society, in areas like biosecurity surveillance, wildlife treatment and health and emergency animal disease management.

Recognised among Australia's most ethical and trusted professionals, veterinarians are highly respected and trusted members of their communities. The Governance Institute of Australia's 2023 Ethics Index ranked veterinarians among the nation's top 10 ethical occupations¹.

¹ Governance Institute 2023 (<https://governanceinstitute.com.au/app/uploads/2023/11/2023-ethics-index-report.pdf>)



Introduction

The Australian Veterinary Association (AVA) welcomes the opportunity to provide input on the proposed implementation of virtual fencing (VF) for beef and dairy cattle. As the peak body representing the veterinary profession, the AVA recognises the potential of VF technology to deliver animal welfare, biosecurity, and management benefits when applied responsibly and in line with evidence-based safeguards.

This submission outlines the AVA's input into the implementation of VF in NSW, including considering:

- The animal welfare benefits of VF technology
- The appropriate use of VF for internal property management rather than external boundary fencing
- Management of VF in relation to roads and property access points
- The processes required for identifying and managing animals that do not adapt to VF systems
- The importance of recording and reporting adverse events to support long-term welfare research.

Recognition of animal welfare benefits

Virtual fencing can deliver clear animal welfare advantages when implemented correctly:

- Reduced physical injury: VF reduces risks of entanglement, laceration, and trauma associated with barbed or wire fences.
- Greater flexibility during emergencies: VF allows rapid removal of boundaries during bushfires, floods, or storms, reducing stress and injury risk.
- Protection of sensitive habitats: VF can exclude stock from riparian zones or degraded land, benefiting both animal welfare and environmental stewardship.

The AVA supports the recognition of these benefits as central to any regulatory framework for VF adoption.

Limiting VF to internal property fencing

The AVA strongly supports the NSW proposal that VF should not replace external boundary fencing. This reflects both animal welfare and biosecurity imperatives:

- Public safety: External fences provide a non-negotiable safeguard against livestock straying onto roads, causing collisions or injury.
- Biosecurity: Physical barriers remain critical for preventing stock mixing across property boundaries and reducing disease risk.
- Legal responsibility: Livestock owners are generally required to maintain secure boundary fences under state laws.

Therefore, VF should only be legalised for internal paddock subdivision, controlled herding, and environmental protection, not as a substitute for external perimeter fencing.



Interaction with roads and property access points

Where roads, laneways, or easements cross properties, clear safeguards are essential:

- VF boundaries should never be set directly along public roads or rights-of-way without an underlying physical barrier.
- Where property roads exist (e.g. for farm vehicles or contractors), virtual boundaries must ensure safe passage and visibility for drivers and livestock.
- Training material for VF users should include guidance on managing boundaries near roads, avoiding confusion for animals that could result in panic or crossing incidents.

Management of animals that do not learn VF

Not all animals will successfully learn the association between audio/vibrational cues and electric correction. Prolonged exposure without learning risks chronic stress and poor welfare outcomes. To manage this risk:

- Identification: Farmers must monitor learning during the initial training phase, supported by system data such as audio-to-shock ratios.
- Intervention: Animals consistently failing to respond must be promptly removed from VF systems and managed by alternative containment methods.
- Veterinary oversight: Persistent non-learners may require veterinary assessment to rule out health, sensory, or temperament-related causes.

This approach ensures individual welfare is protected while maintaining herd-level effectiveness.

Recording and reporting of adverse events

The AVA recommends that all VF regulatory frameworks require consistent reporting and recording of adverse events (e.g. device malfunction, excessive shocks, welfare harms). This will:

- Provide critical data for long-term welfare research, addressing existing gaps on cumulative impacts of VF use.
- Assist regulators in evaluating supplier compliance with animal welfare standards.
- Support refinement of training, device design, and regulatory safeguards over time.
- Establish a register of users that is open access to allow for longer term and larger studies to be carried out.
- Recommend adding a formal review of the technology in 2 years to critically assess the animal welfare benefits as well as the adverse events.
- Consideration should be given to processes for safeguarding when there are power outages and technology downtime. With a local network there will be time when these devices are offline. A device downtime log that is available for critical review would assist regulators and primary producers.



Reporting should include both farmer-logged data and system-generated records, made available to regulators and independent researchers.

Conclusion and recommendations

The AVA supports the controlled legalisation of VF technology, subject to robust animal welfare safeguards. Specifically, we recommend:

1. Recognising animal welfare benefits such as reduced injury, enhanced monitoring, and improved flexibility.
2. Restricting VF use to internal property fencing and explicitly prohibiting substitution for external boundary fencing.
3. Providing clear guidance on VF near roads and access points, ensuring public and livestock safety.
4. Mandating monitoring and removal of non-learners, with veterinary oversight where required.
5. Establishing a system for adverse event recording and reporting, enabling ongoing welfare research and regulatory review.

With these safeguards, VF has the potential to become a valuable tool in modern livestock management, improving welfare outcomes while supporting sustainable and productive farming systems.