



IGAB REVIEW

ANIMAL HEALTH AUSTRALIA

ABOUT ANIMAL HEALTH AUSTRALIA

Animal Health Australia (AHA) is a not for profit company that fosters an innovative partnership involving the Australian government, state and territory governments, major terrestrial livestock industries, and other stakeholders. AHA works with its members and stakeholders to strengthen and improve Australia's national animal health and biosecurity system to ensure it delivers competitive advantage and facilitates market access by maximising confidence in the safety and quality of Australia's livestock products in domestic and overseas markets. In a joint effort with and through our members, we:

- help keep Australia free of the major livestock diseases that are exotic to Australia
- build the sustainability of our livestock industries
- build capacity to enhance emergency animal disease (EAD) preparedness and response
- ensure Australia's livestock health systems support productivity, competitive advantages and preferred market access
- contribute to the protection of human health, the environment and recreational activities.

By working together we achieve a more effective sharing of available and finite resources.

AHA looks forward to participating in the next phase of this review following the Panel's release of its draft report.

AHA's members are listed in Appendix A.

EXECUTIVE SUMMARY

1. Our national biosecurity system delivers competitive advantage, differentiating our produce in the market place and facilitating export growth and market access. To maintain and continue this success Australia requires an evolving biosecurity system that needs ongoing investment and development.
2. Australia's biosecurity system has provided a strong foundation, but is now under strain. Declining resources combined with greater levels of urbanisation, increased movement of people and goods, the expansion and intensification of agriculture and ongoing environmental pressures are providing more opportunities for the entry and spread of pests, diseases and weeds.
3. The current IGAB has been successful in bringing governments together to strengthen their working partnerships and investments to improve the national biosecurity system, but has failed to fully realise its partnership opportunities with others such as industry; IGABs next iteration must make this a focus area for improvement.
4. Even acknowledging the good will of all governments and industry to enhance and strengthen Australia's national biosecurity system, progress to achieving a more integrated approach is constrained by the lack of available resources facing all parties.
5. IGAB fails to provide indicators (qualitative or quantitative) that demonstrate how effectively IGAB has achieved its objectives and outcomes. There should be regular monitoring and reporting on progress to all parties and stakeholders to ensure it is on track to achieve intended results and if not what needs to be done differently to ensure we bring about long-term change.
6. It has been difficult for industry (and other stakeholders) to appreciate fully the business of IGAB. There is still no clear mechanism for industry to engage with NBC on relevant areas of IGAB. Industries ability to share in the responsibility is enhanced when it is fully informed, understands its role and is given the opportunity to be involved in and contribute to the discussions and decisions in a timely way.
7. Other mechanisms to engage industry need to be considered in the next iteration of IGAB. AHA's Industry Forum and Industry Executive, the joint AHA and PHA Industry Forum are existing mechanisms that could be better utilised by NBC.
8. Confusion continues amongst some elements of industry and stakeholders regarding the concept of 'shared responsibility'. As governments increasingly move their investments and resources away from 'asset based protection', the expectations and the understanding of industry and stakeholders has not necessarily kept pace with this change in roles. Ongoing and tailored communication involving all stakeholders is a necessity to address this issue.
9. Minimising and managing future national biosecurity risks would benefit from the development of a national biosecurity strategy. A national strategy would assist in helping stakeholders gain a shared vision, a shared understanding of how the strategic

priorities bring about the overarching outcomes and importantly how their work/their investments fit with the bigger picture.

10. If investments and investment frameworks are to align with priorities then current biosecurity funding arrangements for industry need to be modernised. Current industry levy arrangements lack the flexibility required to meet the needs of Australia's biosecurity system.
11. The key risk to market access in the national biosecurity system is transitioning from reliance on historical disease freedom and perceptions of strong biosecurity and surveillance systems, to providing quantitative surveillance evidence to underpin Australia's claimed disease statuses. Surveillance capability for prompt outbreak detection is also hampered by producer attitudes towards regulators and regulation.
12. To meet the needs of a future national biosecurity system the Australian Government primarily, and state and territory governments secondarily, need to better define national surveillance data needs and justify these needs through outcomes-based logic leading to the goals of market access and industry sustainability.
13. With consideration to the growing demand for evidence of absence of animal disease, a more targeted and government assured approach is often required. In the context of market access, this should include shared investment in targeted and general surveillance directed by trade limiting animal disease information priorities.
14. The current long time lag in the release of data by governments from industry abattoir surveillance programs impedes the producer's ability to effectively and efficiently manage endemic disease on-farm, reduces their competitiveness and constrains improvements to biosecurity practices on-farm.
15. The decline in extension services has hampered not only the extension and uptake of biosecurity practices, but also the adoption of research and development. Industry organisation initiatives, such as the Livestock Biosecurity Network, are starting to fill this void by funding and/or undertaking these extension activities; the proactive support of governments is important to their enduring success and effectiveness.
16. In recent years, there has been a push by government to remove legislation and lighten the perceived burden imposed by governments on industry. However, there have been requests by industries to instigate legislation that would underpin verification and or certification systems that some governments will not entertain. We need to look at co-regulation in a new light where systems are developed and may be implemented and run by industry, but require government support in the way of supporting legislation.
17. There are valuable lessons that industry and governments can learn from the community-led collaborations in the invasive animals and weeds space that have been effective in raising both awareness and practice change. While the key agencies of the jurisdictions' are critical in setting regulatory frameworks, as is the maintenance of ongoing research in this area, it is the communities that are proving instrumental in getting better on-ground results, putting into practice a key principle of IGAB, that biosecurity is a shared responsibility.

INTRODUCTION

Biosecurity is integral to food security, agricultural competitiveness and market access. It goes to the heart of securing the future of our agricultural industries; their profitability, competitiveness and, in turn, the prosperity of rural and regional Australia and the nation itself. Biosecurity measures, its systems and platforms, provide long-term security for agricultural developments, investments and prosperity.

Government and industry partnerships have been successful in delivering a world-class system for dealing with biosecurity risks. The World Organisation for Animal Health (OIE) recently found Australia's reputation as a world leader in animal health and biosecurity systems is justified. Our national biosecurity system currently delivers competitive advantage, differentiating our produce in the market place and facilitating export growth and market access. To maintain and continue this success, Australia requires an evolving biosecurity system that needs ongoing investment and development.

Although biosecurity continues to grow in importance, funding for biosecurity continues to fall in real terms. To date, Australia's existing biosecurity system has provided a strong foundation but is now under strain. Declining resources combined with greater levels of urbanisation, the increased movement of people and goods, the expansion and intensification of agriculture and ongoing environmental pressures are providing more opportunities for the entry and spread of pests, diseases and weeds and threatens our ability to maintain our biosecurity position.

Minimising and managing future risks, while taking advantage of opportunities that a successful biosecurity system presents – i.e. export growth, new markets and businesses - will only be possible by improving our ability to identify shared and common solutions, by better understanding that the biosecurity failures and successes of industries, sectors and communities across the biosecurity continuum and by recognising that our individual and collective fates are interconnected; in so doing, we can maximise our resources and return on investment. This, however, will require a truly coordinated and collaborative approach and integrated system, greater consensus on the opportunities and challenges that exist and improved clarity around roles and responsibilities beyond government to industry and the general community. Key to all of this is a better understanding of the different motives and needs of the diverse stakeholders in this continuum. It is important to be mindful that in our search for common solutions this not does not mean the development of a one-size-fits-all.

QUESTIONS 1, 2, 3 AND 4

Is the IGAB a suitable mechanism to underpin Australia's national biosecurity system in the future (10 or 20 years from now)?

Are the consolidated priority areas still appropriate?

What are your views on the construct, effectiveness, and transparency of the IGAB? Please provide examples.

What practical improvements to the IGAB and/or its structure would provide for an increased, but accountable, role for industry and the broader community?

There is no doubt that the development and implementation of the IGAB was a critical first step towards formally establishing nationally agreed approaches among governments to prevent, prepare for, detect and mitigate biosecurity risks; and respond to, manage and assist in the recovery from biosecurity incidents.

The current IGAB has been successful in bringing governments together to strengthen their working partnerships and investments to improve the national biosecurity system, but has failed to fully realise its partnership opportunities with others such as industry; IGABs next iteration must make this a focus area for improvement.

The focus, particularly in the early days of the National Biosecurity Committee (NBC) has been on strengthening the co-ordination of government policy, resources and working partnerships between governments to improve the national biosecurity system. Indeed, during this time it was difficult for industry (and other stakeholders) to appreciate fully the business of IGAB, despite the assurances and the communications of government parties of the intent and purpose of IGAB. There still remains no clear mechanism for industry to engage with NBC on relevant areas of IGAB; and yet IGAB makes numerous references to a 'shared responsibility', the role of industry (and others) and the opportunities to work together to strengthen the biosecurity system, as seen in Purpose 2.3 of IGAB.

As the responsibility for biosecurity management is also shared by industry, natural resource managers, custodians or users, and the community, this Agreement and its schedules identify opportunities for the Parties and these groups to work together to strengthen the biosecurity system.

This shortcoming was addressed partially through the later inclusion of both AHA and Plant Health Australia (PHA) as observers to NBC to facilitate information flow and consultative mechanisms to our respective industry members and also provide information to NBC. However, to further improve the transparency and effectiveness of IGAB in the future, further consideration needs to be given to industry's future involvement and engagement in IGAB implementation and decision-making. Industry's ability to share in the responsibility and partner investments is enhanced when it is fully informed, understands its role and is given the opportunity to be involved in and contribute to the discussions and decisions in a timely way. NBC is acknowledged for recent improvements in this area, but there is still a way to go.

Other formal and direct mechanisms to engage industry also need to be considered and reflected in the next iteration of IGAB. AHA's Industry Forum and Industry Executive, the joint AHA and PHA Industry Forum are existing mechanisms that could be utilised more by NBC. The Animal Health Committee and, more recently, the National Communications Network's successful engagement with industry also provide an example of how NBC could mirror a similar approach. Each of these committees sets aside time on their agenda for discussion and engagement with industry representatives on animal health, policy and communication issues.

QUESTIONS 6, 7, 8, 9 AND 22

Are the components and functions of Australia's national biosecurity system consistently understood by all stakeholders? If not, what could be done to improve this?

What benefits (or impediments) are there in realising a more integrated national approach to biosecurity, agreed to by key partners in Australia's national biosecurity system?

Are the roles and responsibilities of stakeholders in Australia's national biosecurity system clearly and consistently understood? How might this be improved?

What form would this best take (for example, a national statement of intent or national strategy)? What are the key elements that must be included? What specific roles do you see industry and the broader community playing in such an initiative?

What does success of Australia's national biosecurity system look like? How could success be defined, and appropriately measured (that is, qualitatively or quantitatively)? What, if any, measures of success are in use?

Confusion and misunderstanding continues amongst some elements of industry and stakeholders regarding the concept of 'shared responsibility'. As governments have increasingly extricated themselves in recent years away from 'asset based protection', the expectations and the understanding of stakeholders has not necessarily kept pace with this change in roles and what this means in terms of their own role and responsibilities. "The general view across the biosecurity community is that the government sector (at a jurisdictional level) is gradually stepping away from post-border biosecurity and pushing more responsibility onto industry to manage and invest in post-border activities. While this has the potential to deliver benefits such as greater focus and efficiencies, if this shift leads to confusion around roles and responsibilities it could potentially slow down our national ability to respond to incursions."¹

Some of the confusion around roles and responsibilities will be improved following the introduction of new biosecurity acts federally and in QLD, with NSW to shortly follow suit, due to the communications and engagement with stakeholders that naturally precedes and follows such legislative changes. However, from a national perspective ongoing and tailored biosecurity communication involving stakeholders remains a necessity. This communication

¹ CSIRO Australia's Biosecurity Future Preparing for future biological challenges p14

approach must also include monitoring and evaluation to ensure it is on track to achieve intended results. This is by no means a quick fix and must be undertaken over the long term and therefore requires long term and adequate resourcing; something which has not been achievable under the current IGAB work program.

There is a perception that the IGAB, in a practical sense, acts as a quasi-national biosecurity strategy. However, IGAB was developed by governments principally for governments to improve the national biosecurity system by strengthening the co-ordination of government policy and the resources and working partnerships between governments. As a government to government agreement the national goals and objectives and principles to underpin Australia's national biosecurity system continue to remain relevant. As already mentioned, the IGAB makes numerous references to a 'shared responsibility', the role of industry (and others) and the opportunities to work together to strengthen the biosecurity system, but it is nonetheless some way from being an inclusive and national biosecurity strategy.

All state and territory governments have been in the process of replacing their biosecurity statements with a strategy; some such as NSW and ACT have recently been revised, while others such as NT and QLD are in the process of updating theirs. The Australian Government does not have a biosecurity strategy. In addition, its biosecurity statement (the alternative to a strategy) is out of date (last being reviewed in 2003).

These jurisdictional strategies acknowledge that biosecurity is a shared responsibility; articulate a vision, goals/objectives and strategies for implementation and usually include some kind of performance indicators. They set out recommended strategic directions for all stakeholders in that jurisdiction to work towards over the next 10 years and the expected outcomes. Importantly, all involved extensive consultation with stakeholders to ensure buy in from affected parties and stakeholders.

The state and territory government strategies clearly provide the foundations for the respective jurisdictional government, industry and non-government organisations and the community to work together and to share resources, knowledge and expertise to develop a strong biosecurity and integrated system.

Minimising and managing future national biosecurity risks, while taking advantage of opportunities that a successful biosecurity system presents, would also benefit from the development of a national strategy. Importantly a national strategy would give greater effect to IGAB'S partnership opportunities, by enabling industry, other stakeholders and government to work more effectively in partnership, building greater consensus on the opportunities and challenges that exist, clarifying roles and responsibilities and maximising through shared understanding and coordinated collaborations the return on resources and investments for all.

In March 2015, NBC agreed to develop a National Biosecurity Statement to assist with engaging and communicating with external stakeholders and the community about the national biosecurity system, the importance of biosecurity, the concept of shared responsibility and to set the context for jurisdictional biosecurity strategies. A draft Statement was developed, but its further progress remains unclear. The draft Statement went some way in explaining the biosecurity continuum, shared responsibility and national arrangements to manage biosecurity in Australia. The draft Statement, while important as a future information piece, is not a substitute for a national biosecurity strategy.

The development of a national strategy would assist in helping stakeholders gain a shared vision, a shared understanding of how the strategic priorities bring about the overarching outcomes and importantly how their work/their investments fit with the bigger picture. I.e. any action taken is more likely to be understood and shared. The recently released *ACT Biosecurity Strategy 2016-2026* is to be commended for its clarity and simplicity, providing vision, context and its fit within both the national approach to biosecurity and NSW, as well as clear performance indicators related to outcomes.

While the current IGAB and jurisdictional biosecurity strategies identify high level outcomes against priority areas, it then falls short by failing to provide indicators (qualitative or quantitative) that demonstrate to the parties (and other partners/investors) how effectively IGAB has achieved its objectives and outcomes over its five years. It is therefore difficult for NBC as well as industry and other partners, to evaluate its success at reaching its set outcomes. There should be regular monitoring and reporting on progress to all parties and stakeholders to ensure it is on track to achieve intended results, and if not, what needs to be done differently to ensure we bring about long-term change.

QUESTION 10

What practical actions do you think governments and industry organisations can undertake to strengthen the involvement of industry and community stakeholders in Australia's national biosecurity system?

Would increased involvement in decision making on and implementation of biosecurity activities help the adoption of shared responsibility?

In addition the information below, the Panel is referred to AHA's responses to the combined Questions of 1 to 4; 6 to 9, 22; and 17.

Australia has seen a depletion of extension services over the last 10 years. This depletion has hampered not only the extension and uptake of biosecurity practices but also the adoption of research and development. Industry organisation initiatives are starting to fill this void; however to be truly effective and successful, they must have the proactive support of governments.

Industry initiatives offer the potential for jurisdictions to both complement and leverage their biosecurity activities and/or to engage for service delivery. One particular model that has proven itself is the co-investment between the state governments and the grains industry for extension officers to be employed to raise awareness of biosecurity and improve practice change on farm and in the supply chain. In the grazing livestock industries, the Livestock Biosecurity Network (LBN)² was formed to achieve similar outcomes as that of the grains' extension officers' model.

² The Livestock Biosecurity Network is an independent industry initiative established in 2013 by the Cattle Council of Australia, Sheepmeat Council of Australia and Wool Producers Australia funded over a three-year pilot period by industry levies. With the completion of the pilot period, LBN is to transition to a subsidiary company of AHA late-2016; Cattle Council of Australia will be the other shareholder. For more information on LBN refer to <http://www.lbn.org.au/>

The LBN, through its national network of regional officers, builds public/private partnership networks with the aim of facilitating the delivery of on-farm biosecurity information; providing livestock producers with the necessary tools and information to manage disease, pest and weed events on their farms; providing mechanisms for public consultation on animal health, welfare and biosecurity issues; and supporting all jurisdictions by enhancing regional industry capability in the event of an emergency animal disease incursion.

LBN has made real inroads into better preparing Australia's livestock industries to manage biosecurity risks. LBN also provides a channel to work more closely with other industry programs, agencies and livestock species on their biosecurity communication and extension activities in the future.

Moving forward, it is essential that industry services/programs, such as the LBN, are proactively supported by governments to assist industry organisations to achieve the broader goals of the biosecurity system. More details can be found AHA's response to Question 17.

Also of interest to AHA (as a recipient of industry animal health/biosecurity levies) and pertinent to this review is the Senate Inquiry into Primary Industries Levies and Charges Collection Amendment Bill 2016. The proposal is to remove legislative impediments to the development of levy payer registers. If successful, this would enable the Department of Agriculture and Water Resources (DAWR) to provide levy payer contact information to an 'eligible recipient' such as the research and development corporations, which would enable them, amongst other things, to consult directly with the levy payers who fund the research and development system.

AHA has made a submission to this inquiry, emphasising that our ability to communicate quickly, efficiently and directly with levy payers is vital when communicating messages regarding EAD events. Especially when the rapid distribution of information regarding an outbreak or incident will dramatically reduce the spread of the disease and, therefore, significantly reduce the costs to all signatories of the Emergency Animal Disease Response Agreement (EADRA) - mitigating the effect on the national economy. Furthermore, the ability to communicate effectively during non-outbreak times on EAD preparedness and biosecurity on-farm enhances our biosecurity system. Presently, Australia's EAD response processes do not include the ability to directly communicate with the levy payer, which is likely to increase the costs of a response.

QUESTIONS 11, 12 AND 13

Are the IGAB investment principles still workable? Do they still meet the needs of Australia's national biosecurity system now and in the future?

Are governments and industry investing appropriately in the right areas? Are there areas where key funders should be redirecting investment? Can investment in biosecurity activities be better targeted? If so, how? Please provide examples.

How do we ensure investments and investment frameworks align with priorities, while being flexible enough to address changing risks and priorities?

The current IGAB investment principles are reasonable. The Panel is referred to AHA's responses to the combined Questions 14 and 15, concerning the need to address the current biosecurity funding arrangements for industry to ensure investments align with priorities and are sufficiently flexible to address changing risks and priorities.

With consideration to the roles of industry and governments, there are substantial negative spill-overs that exist in animal biosecurity continuum, that will always necessitate to some degree an ongoing key role of government to conduct (and possibly subsidise) certain biosecurity activities; nevertheless governments (and NBC) are increasingly focusing their investments on where their return is highest on the generalised invasion curve i.e. prevention, early intervention and eradication rather than asset based protection and are guided by the IGAB investment principles.

Government have led the way with this approach and while industry is now familiar with it, some elements of industry argue this is, for all intent and purposes, "cost shifting" - although this view is becoming increasingly less. The wider benefits of this approach, however, are perhaps not being communicated to industry as well as it could be. These benefits are more readily seen when considered against a suite of investments in the biosecurity continuum. For example, the jurisdictions, through NBC, have undertaken a self-assessment of their biosecurity emergency preparedness; AHA also provided information into this assessment based on its suite of project investments. While there are shortcomings to this approach, this collective information - a 'stocktake' - assists in providing a more holistic view of investments in and the management of biosecurity risks jurisdictionally and nationally; *as a guide* it enables a more informed discussion on potential gaps, areas of risk etc. and supports a coordinated approach. This stocktake information is currently restricted to NBC as a work in progress; hopefully, at some point it will be aggregated to a higher level and used as an aid in future discussions and partnerships with industry and also to show the substantive investments of governments in preparedness and efforts to develop it further.

As mentioned, AHA has also applied the investment portfolio approach to its (governments, industry and other stakeholders) suite of biosecurity investments over the last four years. It showed a spread of investments across the invasion curve; that governments were the major investors in emergency preparedness (although industry was also a significant

contributor)³, while industry is heavily invested in asset based protection with relatively minor contributions from governments. There are limitations to this work, nonetheless it is a useful resource for priority setting and management of biosecurity risks in AHA discussions and forums with our members.

AHA works closely with the livestock RDCs (e.g. MLA) and organisations such as the Red Meat Advisory Council (RMAC) in determining where levy dollars can be leveraged to maximise returns whilst removing duplication of work. The two service companies' work with RMAC to provide RMAC with outcomes that can be used to meet the Meat Industry Strategic Plan. The livestock industries should also consider whether they might also benefit by taking a strategic portfolio approach, facilitated by the service providers that are the recipients (and investors) of levies for research, development, extension and other related biosecurity and animal health investments. This would provide the livestock industries (as well as the recipient levy organisations like AHA) with a far more comprehensive picture of their investments in the biosecurity continuum and improve planning to mitigate biosecurity risks through future investments.

AHA, in consultation with our members, has also undertaken a review of the EADRA performance standards (March 2016); the EADRA acknowledges the need to develop performance standards for animal health services and to apply these standards to activities under the Deed. For governments and industry it is critical that they can demonstrate that they are adequately prepared for an EAD response and that they demonstrate continual improvement in biosecurity risk mitigation.

AHA member organisations were assessed against a series of evolving national animal health performance standards in 2001, 2003 and 2007; however, this assessment became increasingly complex, onerous and time consuming⁴. Since then, governments have undertaken their own assessments of performance in the area of biosecurity, such as QLD's *FMD Capacity and Capability Review* (and its recent *Biosecurity Capability Review*) and Victoria's Auditor-General's report *Biosecurity — Livestock*, as well as the NBC stocktake, the NBC assessment of the National Environmental Biosecurity Response Agreement (NEBRA) and the OIE evaluation of Australia's animal health services. However, livestock industries have struggled with participation in the animal health performance assessments.

AHA members overwhelmingly agreed that outcomes based 'performance standards' and verification processes should be developed by both government and industry, to enable all parties to the EADRA to have confidence that each is contributing to the overall national animal health system through on-going risk mitigation. Members recognised the assessments and work that has been undertaken by governments, but that there needs to be a transparency and sharing of this information. Mutual, regular and open reporting on the status of performance standards and more consultation between governments and industry on application of resources, in the spirit of a true partnership, would facilitate this. AHA will continue to work with industry members to facilitate the development of

³ This is not unexpected since AHA core funded projects are key national projects that are of value to all AHA Members/Signatories to the EADRA.

⁴ *National Animal Health Performance Standards – A Review* Dr Rob Rahaley March 2016.

appropriate assessment and reporting systems, using the Glanville Scorecard system⁵, to demonstrate the industry status with regard to risk mitigation and emergency disease response preparedness.

QUESTIONS 14 AND 15

Are current biosecurity funding arrangements still appropriate to meet the needs of Australia's national biosecurity system, now and in the future? What might an alternative or novel funding model encompass?

What can be done to ensure an equitable level of investment from all stakeholders across Australia's national biosecurity system, including from risk creators and risk beneficiaries?

If investments and investment frameworks are to align with priorities, then the current biosecurity funding arrangements for industry need to be modernised; current industry levy arrangements lack the flexibility required to meet the needs of Australia's biosecurity system. Industries ability to partner in biosecurity priorities, as well as maintain and enhance asset based protection, is compromised by this lack of flexibility. Previous reviews by the DAWR of the levy principles and guidelines have failed to address this issue of flexibility. The levy principles and guidelines, while necessary, are unreasonably onerous (and therefore a significant cost-burden in themselves) and impractical when industries wish to redirect levy funds within their existing levy streams without changing the quantum of the total levy collected. Enabling flexibility in the application of levies would be of benefit to industry and also to government. Such a change would provide the necessary agility to redirect and thereby enhance investments to meet the changing landscape of animal health and biosecurity management and the dynamic nature of livestock production.

AHA understands that the DAWR is seeking to conduct some preliminary scoping work on the design and operation of the agricultural levies system. The work will include an examination of levies related legislation and regulations to ascertain if there are ways to streamline and improve flexibility, including an analysis of opportunities to improve the efficiency, effectiveness, administrative arrangements and legislative and policy settings of the current levies model.

As mentioned in AHA's response to the combined Questions 11 to 13 above, as governments have increasingly moved to give effect to the principle of biosecurity as a shared responsibility focusing their investments on where their return is highest on the generalised invasion curve i.e. prevention, early intervention and eradication rather than asset based protection, this has put more pressure on industry funds and existing funding mechanisms. Compounding this pressure, is that in addition to the national levy arrangements that are in

⁵ In 2014, to evaluate Queensland's state of preparedness for FMD, Dr Ron Glanville developed a Capacity and Capability Assessment template and scorecard using elements of the previous NAHPS, NEBRA and OIE PVS systems. This scorecard provides an excellent visual representation of the current status and the target state of development of the system under assessment. This system was broadened to assist in the assessment of the overall biosecurity capability and preparedness in Queensland and Victoria during 2015 using the assessment terminology of the NEBRA Maturity Matrix. Key features of the Capacity and Capability Assessment are that the target state must be identified and proposed actions to reach that target must be documented.

place for livestock industries, some producers also pay additional levies (and/or fees) for animal health, biosecurity and other services delivered by some jurisdictions. These additional jurisdictional 'levies' also need to be accounted for when considering any new future funding model because, when combined with existing national industry levy arrangements, they affect producers' ability to pay for and, in turn, invest in agreed national biosecurity priorities.

Currently, the beneficiaries rather than the risk creators appear to burden more of the investment costs. Where the risk creator is not also the potential beneficiary (or at least to the same extent) then government intervention and regulation should apply. The introduction of new biosecurity acts federally and in QLD (and soon NSW) will hopefully go some way to redressing this in-balance by recognising that everyone has a role to play in managing biosecurity risks. For those involved in activities likely to pose a biosecurity risk, failure to take reasonable steps to mitigate these risks will result in legal and/or punitive action being taken.

QUESTION 16

Are market access considerations given appropriate weight in Australia's national biosecurity system? What other considerations also need to be taken into account?

Animal health status is a potential technical barrier to market access. Given Australia's heavy reliance on exports, supporting and improving market access is an important goal of the national biosecurity system. Another important goal is the sustainability of the Australian livestock industries, which demands prompt disease outbreak detection and early response.

Several foundational activities in the national biosecurity system indicate that market access is given a top priority including the National Animal Health Information System (NAHIS) (since 1996) and targeted surveillance programs - National TSE Program and National Arbovirus Monitoring Program (NAMP). More recently, the national surveillance strategy (2015) and business plan (2016) similarly indicate a market access priority.

AHA considers the key risk to market access in the national biosecurity system is transitioning from reliance on historical disease freedom and perceptions of strong biosecurity and surveillance systems, to providing quantitative surveillance evidence to underpin Australia's claimed disease statuses. I.e. equal weight needs to be given to underpinning Australia's animal health status and disease detection capability as is given to claiming and promoting Australia's status. To provide quantitative evidence, much greater consideration and investment is needed to underpin veterinary services fundamental to our own understanding of Australia's animal health status. Priorities include defining, forecasting and communicating the critical information needs for trade and market access, translating these priorities into action by investing in targeted surveillance activities to meet these information needs, and better use of routine animal health and disease investigation information.

Whilst market access is an undisputed goal, equal consideration needs to be given to Australia's capability for prompt outbreak detection. A long decline in state and territory government extension services to livestock industries has made Australia more reliant on private veterinary practitioners and their relationship with producers to effect surveillance.

The initiation of the National Significant Disease Investigation Program in 2008 is an example of this. However, the program has an inherent risk that by providing subsidies for disease investigation it depends highly upon the commercial value of an investigation to both the veterinarian and the producer.

Surveillance capability for prompt outbreak detection is also hampered by (negative) producer attitudes towards regulators and regulation resulting from experience with, and observation of, outbreak responses and disease control (e.g. swine flu, Johne's disease, EI and FMD in the UK).

QUESTION 17

Are there ways governments could better partner with industry and/or the broader community to reduce costs (without increasing risk), such as industry certification schemes?

With the success of national partnerships and related programs, and the growing commitment to a shared responsibility for biosecurity, AHA is of the view that a partnership model is only growing in relevance and is an appropriate mechanism for reducing costs. A collaborative approach not only results in greater resources but also helps to achieve a shared commitment to enhance the resilience and integrity of the national biosecurity system.

AHA recognises that biosecurity is a shared responsibility and has a strategic interest in putting this into practice. The NAHIS program and its publication *Animal Health in Australia Report* have long demonstrated an effective animal biosecurity system, contributed to by both industry and governments, to support trade in animals and animal products. This program is one-third funded by industry partners. The NAMP is majority funded by industry partners in recognition of its primary importance for market access. AHA manages many other successful animal health programs partnering with industry.

With consideration to the growing demand for evidence of absence of animal disease, a more targeted and government assured approach is often required. In the context of market access, this should include shared investment in targeted and general surveillance directed by trade limiting animal disease information priorities. Abattoir surveillance is another area where governments and industry can enhance their partnerships. Data is collected and provided to: producers to identify where production savings can be made; processors to identify where costs associated with the processing of stock can be minimised; governments for certification purposes.

An example where governments can better partner with industry is with the National Sheep Health Monitoring Project. This project has been funded by the Sheepmeat Council of Australia and WoolProducers Australia for the past 10 plus years. Over this time it has progressed from being a targeted surveillance program for ovine Johne's disease to one looking at 14 different production conditions. The industries spend over \$1 million annually to collect this data to deliver against the first two of the three points listed above. The state and territory governments have access to this data for their own purposes.

However, there are a number of hurdles this project has had to work with and overcome. Some examples follow:

- Government employed meat inspectors do not collect animal health data. This was excluded during the last round of award negotiations when consulting with the unions.
- Collection of data for stock coming from properties (e.g. saleyards) that are of mixed origin. The traceability system implemented by the sheep and goat industries does not allow to collect against the property of origin. As the system is visual and the chain speed in abattoirs is fast the alignment of PIC to body number is impossible.
- Collection of accurate data. This has been overcome somewhat through the use of tablets on the kill floor.
- Training and standardisation of assessment of meat inspectors provides accuracy of data being collected. AHA provides training of meat inspector staff in all abattoirs being collected.
- Provision of meat inspector staff to abattoirs to collect the data. This is on top of the staff employed by the abattoir.
- Dissemination of data to the producers and abattoirs. AHA has had to be reliant on the states to do this as AHA does not have access to the state PIC registers. This information is protected by privacy legislation and will not be released by the states. Jurisdictions are currently releasing this data to producers either monthly or quarterly at best. This does not allow for the producer to correct the issues being identified. In addition, AHA has been waiting for the MLA led Livestock Data Link (LDL) system to be developed. Unfortunately, this is still being developed after five plus years and would solve the feedback issues if made available.

The long lag in the release of this data impedes producer's ability to effectively and efficiently manage endemic disease on-farm, impedes the producer's ability to effectively and efficiently manage endemic disease on-farm, reduces their competitiveness and constrains improvements to biosecurity practices on-farm.

In recent years, there has been a push by government to remove legislation and lighten the perceived burden imposed by governments on industry. However, there have been requests by industries to instigate legislation that would underpin verification and/or certification systems that some governments are reluctant to entertain. The argument being that governments are trying to remove legislation, not impose new legislation.

We need to be able to look at co-regulation in a new light where systems are developed and may be implemented and run by industry, but need government support in the way of supporting legislation. An example is the development and integration of traceability and verification systems - National Livestock Identification System (NLIS) and Livestock Production Assurance (LPA) program. This is an ongoing matter but to undertake such a task requires governments and industry to work together and support a common outcome – an outcome that will provide cost savings into the future whilst improving systems that allow international market access for livestock and their products.

Undoubtedly food safety, traceability, and biosecurity systems prove the integrity of Australia's food and fibre, underpin consumer confidence in the product, and strengthen the case for ongoing and improved market access. Equally important is that they also improve

biosecurity by raising awareness and bringing about practice change on farm and through the supply chain.

The *SAFEMEAT Initiatives Review 2013* took a whole-of chain approach to assessment of the red meat industry's integrity system. The Review and red meat industry recognised that opportunities existed for better integration and increased efficiencies within the current integrity system, to build a stronger integrated system that better meets customer expectations and will safeguard market access. Two key actions in the implementation pathway to deliver a fully auditable and responsive whole-of-chain risk management system that maintains market access, food safety and product integrity (including traceability, animal welfare and biosecurity) are:

- “That industry integrity programs and state and territory jurisdictions adopt the ‘Framework for addressing serious non-compliance with the National Standards for food safety, traceability animal welfare and biosecurity’
- That states and territories consider recognition of industry integrity programs as a means of complying with regulated National Standards for food safety, traceability, animal welfare and biosecurity”⁶

Industry integrity programs are a means of complying with regulated national standards for food safety, traceability and biosecurity. Hence, co- regulatory models built around accredited and verifiable industry integrity programs are a vehicle for demonstration that commercial supply chain participants are meeting agreed standards. They also deliver significant benefits and efficiencies to both government and industry, in particular:

- empowering industry enterprises to jointly manage regulatory and commercial requirements under a self-managed accredited program (i.e. their own competent auditors rather than government inspectors)
- working with other industry systems to identify and manage problems and industry ownership of issues can effect lasting behavioural change
- empowering industry to demonstrate compliance with National Standards
- jurisdictions retaining responsibility for setting standards including skills, qualifications etc. of people nominated by the enterprise to monitor compliance with regulatory requirements and for any necessary enforcement action
- a more holistic approach means problems can be identified and addressed effectively
- allowing jurisdictions to redirect dwindling resources to areas of greater need
- industry integrity programs still have reporting obligations to the jurisdictions particularly for serious breaches or criminal behaviour
- jurisdictions retain the power to revoke or suspend a failing or discredited program.⁷

There are also valuable lessons that industry and governments can learn to improve biosecurity awareness and create practice change on-farm from the community-led collaborations in the invasive animals and weeds space. While the key agencies of the

⁶ Towards an Integrated Integrity System A report by the SAFEMEAT Initiatives Review Steering Group August 2015 p6

⁷ Towards an Integrated Integrity System A report by the SAFEMEAT Initiatives Review Steering Group August 2015, p19

jurisdictions' are critical in setting appropriate regulatory frameworks, as is the maintenance of ongoing research in this area, it is the communities that are proving instrumental in getting better on-ground results. Lessons can be learnt from existing community-led programs, such as the Invasive Animals CRC "Facilitating Community led Rabbit Management"⁸. The project was established to be a catalyst for more sustainable, effective community-led action on rabbit management across Australia⁹. The Victorian Rabbit Management Collaboration Initiative is part of this collaborative project. The Initiative supports community-led action (rather than a top down approach), recognising the importance of all land holders, land managers and groups with rabbit management responsibilities to coordinate their effort around clear short and longer-term goals. This already occurs in many communities across Victoria, and the considerable community, industry and government interest to further support and enable community leadership and action on rabbits should be noted¹⁰. Systems-thinking was used to understand how rabbit management works from a range of perspectives, test assumptions, and to develop and test strategy ideas. People learned from each other's' knowledge and experience of rabbit management."¹¹

QUESTION 18

How can the capacity and capability of surveillance systems (including diagnostic systems) underpinning Australia's national biosecurity system be improved?

The National Animal Health Surveillance and Diagnostics Strategy (2015) and Business Plan (2016) represents a collaboration and commitment of Australian governments and industry to maintain and improve Australia's surveillance and diagnostic system. AHA recommends these resources to the Review Panel for addressing Question 18.

AHA notes that further work is required implementing the National Surveillance and Diagnostics Business Plan to engage livestock industries in biosecurity surveillance activities critical to market access and EAD detection. To achieve this engagement, there needs to be better communication to industries of the threats to Australia's biosecurity system and adequate engagement of veterinary and laboratory diagnostic services.

⁸ <http://www.invasiveanimals.com/>

⁹ "The most significant challenge for rabbit management is to influence the human dimensions of natural resource management policy and practice so systems-based participatory approaches are used to work with stakeholders and thereby integrate the human dimension." <http://www.invasiveanimals.com/>

¹⁰ <http://www.pestsmart.org.au/community-led-action-for-rabbit-management-in-victoria/>

¹¹ Victorian Rabbit Management Collaboration Initiative Lisa Adams, National Rabbit Facilitator iv

QUESTION 19 AND 20

Which specific areas of Australia's national biosecurity system could benefit from research and innovation in the next five, 10 and 20 years and why? Please provide examples.

How can coordination of biosecurity related research and innovation be improved.

AHA refers the Review Panel to the National Animal Biosecurity Research, Development and Extension (RD&E) Strategy as a resource for these questions. Using a partnership approach, the National Animal Biosecurity RD&E Strategy aims to identify and address capability gaps through effective allocation of RD&E resources (including human capability and infrastructure) nationally, by helping to ensure they are applied in an efficient and collaborative way.

AHA coordinates the implementation of the National Animal Biosecurity RD&E Strategy on behalf of government and industry stakeholders, including animal-based rural research and development corporations, Australian universities with agriculture and veterinary faculties, CSIRO and the Australian, state and territory governments. In the short time we have been involved in this project we have identified a number of areas where the innovation system can improve. Nevertheless, progress on the strategy is slow, essentially due to the competing priorities of participants who have already committed resources to their own respective organisational strategies and performance criteria as well as the National and Rural Research and Development Priorities. New sources of funds targeting the agreed identified priorities would accelerate progress.

AHA has also identified diagnostics, technology transfer and market assurance as three major areas of Australia's national biosecurity system that would benefit from future research and development.

Diagnostics:

The animal health system still has gaps in the effective testing for livestock diseases. These gaps need to be filled with diagnostic tests that are sensitive and specific for the disease agent(s) being identified. Such tests, due to their inaccuracies, can exclude Australian product from international markets. It is important to note this is not just about having an accurate test, but also about having cost effective testing regimes as well. The cost of testing can be enough to drive the decision making agenda to not participate in certain markets.

Technology transfer:

There are two major considerations to this issue: reducing time to reporting, and adoption of innovation. The EADRA aims to facilitate:

- (a) the immediate reporting of suspect EADs by providing financial disincentives for any failure to report
- (b) an early and comprehensive response to an EAD, to define the nature of the disease and contain its spread.

Improvements in technology can only assist Australia's animal health system to achieve this goal. The use of new communication and reporting tools (e.g. Smart phone Apps) will assist in reducing the time taken to report. However, the sociological barriers associated with the

transfer of this information first need to be understood and systems put in place to remove the barriers.

Technology transfer to improve the rate of adoption throughout the supply chain is where Australia's innovation system is breaking down. In agriculture we are experiencing upwards of 60% of innovation not being adopted and the time taking to adopt is taking longer and longer. Australia needs to ensure that adoption is achieved in a relatively shorter time frame and in a more cost effective way. Some more research into this vital area is required. Question 21 also addresses this issue.

Market assurance systems:

Australia has previously led the world in the implementation of market assurance and verification systems for its agricultural products. Without these systems, Australian produce would not be exported to the numerous markets throughout the world that it is today. What Australia needs to achieve is the development of systems that can collect or bring information from disparate areas together that underpin the certification processes (e.g. NLIS, LPA, state departmental PIC registers). It is these systems that need to be developed and instigated. Also refer to AHA's response to Question 17.

QUESTION 21

How can innovation (including technology) help build a more cost-effective and sustainable national biosecurity system?

AHA recognises the importance of innovation to meet biosecurity needs sustainably. With regard to priorities in animal health, the challenge is to substantially reduce the expected time to detection of disease outbreak emergencies and improve capacity to analyse animal health and biosecurity data to produce disease 'intelligence'.

AHA sees an opportunity for dedicated smartphone applications to improve animal health awareness for producers and animal health professionals to recognise and report significant disease outbreaks earlier. Mobile phone/tablet applications based upon a network of users are shown to have inherent capability to identify and connect 'stakeholders' and provide rapid situational awareness during disease spread. With regard to detecting and responding to biosecurity threats, these applications could equip producers and governments to more effectively communicate and manage biosecurity risks and enable more rapid detection of biosecurity emergencies.

In addition, national data linkages between government animal health systems could provide a capacity to produce disease 'intelligence' to: provide quantitative evidence of absence of biosecurity threats, recognise emerging diseases and outbreaks sooner, monitor the national distribution of endemic diseases and nationally monitor the performance of surveillance and response activities. Australia lacks national integration of state and territory government systems which is required to enable a real-time, national perspective on biosecurity information (e.g. PIC registers, laboratory systems). AHA refers the Review Panel to the National Animal Health Surveillance and Diagnostics Business Plan (2016) for a description of related animal health surveillance initiatives to help build a more cost-effective and sustainable national biosecurity system.

QUESTIONS 23 AND 24

What would be required to ensure data collection and analysis meets the needs of a future national biosecurity system? Who are the key data and expert knowledge holders in the national biosecurity system?

How can existing or new data sets be better used? How might data be collected from a wider range of sources than government?

AHA notes that two structures fundamentally shape data collection and analysis in Australia's biosecurity system with regard to animal health: the agreed National List of Notifiable Animal Diseases, and the Australian Constitution, assigning responsibility to state and territory governments for animal health services within their respective borders.

The state and territory governments are key data and expert knowledge holders in the biosecurity surveillance system, as are the Australian Government border services e.g. Border Security and the Northern Australia Quarantine Strategy. Some livestock industries, especially the intensive industries, also hold data and knowledge, which is yet to be harnessed. A major stumbling block to improving data collection and analysis, and one that affects all parties, relates to privacy legislation and the use of data for wider purposes. There is a need to identify methods that can overcome these issues.

With regard to animal disease surveillance and monitoring, the National List continues to define the needs of the national biosecurity system including through the NAHIS program, and more recently the National Biosecurity Information Governance Agreement, which seeks to expand the scope of information sharing (with a standard data set) beyond national notifiable animal diseases.

To meet the needs of a future national biosecurity system, AHA's observation is that there is a requirement for the Australian Government primarily, and state and territory governments secondarily, to better define national surveillance data needs and justify these needs through outcomes-based logic leading to the goals of market access and industry sustainability. Whilst the IGAB, National Biosecurity Information Governance Agreement and Framework provide the broad policy commitment for national information management, their implementation to animal health is hampered by a lack of compelling detail to justify information sharing needs.

AHA notes that if we were to measure the performance of the national biosecurity system in animal health against the goal of market access and trade, Australia continues to adequately demonstrate effective biosecurity surveillance and reporting systems, largely through qualitative means and maintaining trading partner 'confidence', rather than through the use of quantitative data. AHA also notes that previous national efforts to monitor the performance of biosecurity surveillance at the level of the state and territory government service providers have been unsuccessful (National Animal Health Performance Standards, previous national surveillance business plans, National Significant Disease Investigation Program, Laboratory General Surveillance Data Project of NAHIS). A conundrum exists whereby the national need to monitor performance is sound and accepted yet the responsibility for mitigating the risk lies with individual state and territory government

services and the potential for market loss or a disease outbreak is unpredictable and over an extended timeframe.

AHA is of the view that to ensure biosecurity surveillance data collection and analysis meets the needs of a future national biosecurity system, a clearer description of national information needs is required, justified by a clearer link to intermediate outcomes leading to market access. Subsequent investment should be managed nationally, targeted at addressing these specific needs, including through better engagement of livestock industries.

AHA recognises the imperative to make best use of existing data sets to address biosecurity surveillance goals and to consider sources other than government. (AHA notes that this is a priority of the National Surveillance Business Plan (2016) and refers the Review Panel to this resource).

However to be cost-effective, the opportunity to use existing or new data sets must be epidemiologically evaluated for its ability to answer specific questions of the national biosecurity system. Different data sources can have very different strengths and if data is collected for another purpose it is possible that the cost of ongoing central acquisition and analysis of data could outweigh its benefit. Alternatively, to address specific national biosecurity questions, it may be more cost-effective to invest directly in securing the necessary data.

For example, the use of negative test results, of healthy animals, for specific diseases ('negative data') is often promoted as useful part of a dossier for proof of disease freedom. Whilst some value can be attributable to any data, of primary importance to trading partners is the likelihood that clinically sick animals are detected and investigated to the point of a diagnosis excluding the possibility of specific disease of interest. Hence, if evidence of absence of specific disease of interest is required, investing in a cross-sectional survey or diagnostic exclusion testing of a small number of sick animals may be more cost effective than acquiring and analysing testing results on a large number of health animals.

Importantly, rather than pursuing existing or new data sets and from a wider range of sources, acquiring data to address a biosecurity goal must be directed by the intended output of a data analyses. This approach is inherently cost effective and has the benefit of showing data providers (either government or industry) a logical path to the intended goal, essential for justifying access to a wider range of data sources.

APPENDIX A: ANIMAL HEALTH AUSTRALIA MEMBERS

AHA has 32 Members spread across four categories:

- Australian Government, state and territory governments
- Livestock Industries
- Service Providers
- Associate Members

Australian Government Australian

Government Department of Agriculture and Water Resources

State and Territory Governments

The State of New South Wales
The State of Queensland
The State of South Australia
The State of Tasmania
The State of Victoria
The State of Western Australia
The Australian Capital Territory
The Northern Territory

Livestock Industries Australian

Alpaca Association Limited
Australian Chicken Meat Federation Inc.
Australian Dairy Farmers Limited
Australian Duck Meat Association Inc.
Australian Egg Corporation Limited
Australian Horse Industry Council
Australian Lot Feeders' Association Inc.
Australian Pork Limited
Cattle Council of Australia Inc.
Equestrian Australia Limited
Goat Industry Council of Australia Inc.
Harness Racing Australia Inc.
Sheepmeat Council of Australia Inc.
WoolProducers Australia Limited

Service Providers

Australian Veterinary Association Limited
Commonwealth Scientific and Industrial Research Organisation (CSIRO)

Associate Members

Australian Livestock Export Corporation Limited (LiveCorp)
Racing Australia Limited
Council of Veterinary Deans of Australia and New Zealand
Dairy Australia Limited
National Aquaculture Council Inc.
Zoo and Aquarium Association Inc.
Wildlife Health Australia



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