

## Plant Biosecurity Cooperative Research Centre

### Submission to IGAB Discussion Paper

July 2016

#### THE IGAB

1. **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?**

Yes, the original work and principles are sound and the priorities have not changes significantly.

2. -

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

The creation of a schedule to the IGAB which clearly sets out the roles and responsibilities for all sectors of the biosecurity system would enhance the IGAB and provide greater meaning and clarity for a wider audience.

#### AGREEING TO RISKS, PRIORITIES AND OBJECTIVES

4. **Is the goal, and are the objectives, of Australia's national biosecurity system still appropriate to address current and future biosecurity challenges?**

Yes, the goal and objectives are still appropriate for Australia and many of our trading partners.

5. **In order of importance, what do you see as the most significant current and future biosecurity risks and priorities for Australia and why? Are Australia's biosecurity objectives appropriately tailored to meet these risk and priorities?**

The most significant risk to Australia's biosecurity system is the lack of appropriately qualified capability, especially in frontline biosecurity staff. In order to support the objectives of Australia's biosecurity system front line staff require basic mandatory qualifications in the plant and/or animal sciences. In addition, a decline or lack of support for state-based and national research that underpins biosecurity decision making is an identified risk.

6. **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?**

No, stakeholders form an understanding of Australia's system based on their own first-hand experience with international travel, importing or exporting goods, or the impact of introduced pests. Very few stakeholders have an overall appreciation of the elements in the system.

7. **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?**

There are clear benefits to an integrated approach, from national understanding of pre-border risks, to consistent diagnostic and surveillance methods/standards, to a national and efficient responses, and to consistent and efficient access to markets.

8. **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?**

A national strategy clearly setting out the roles and using some specific case studies as examples.

## EMBEDDING SHARED RESPONSIBILITY

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

No, there is considerable confusion around the meaning of the term 'Shared responsibility'. A schedule to the IGAB setting out the roles and responsibilities would improve the common understanding of this term.

10. -

## FUNDING BIOSECURITY

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

The principles are sound but require greater clarity on how they are implemented.

12. **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.**

In order to protect and grow market opportunities investment must be targeted and based on science, both short-term and long-term, as opposed to short term perceived or publicly acceptable needs (e.g. simply increasing the number of border inspection staff).

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

High quality science to inform independent and expert decision making processes, including consultation with end-users and beneficiaries.

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## MARKET ACCESS

16. -

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?**

Yes. For example, the government/industry relationship in the Grains Industry Market Access Forum (GIMAF) where, in response to market access problems, the industry has taken the leadership role in providing information that supports the technical market access submissions prepared by the Department.

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

Significant improvements can be made by embracing new technology, especially around digital systems and data collection and management, and enabling uptake by industry and the broader public.

National (agreed) standards to improve rigour of surveillance data which is set by the Commonwealth and supported with funding to those responsible for surveillance activities.

## THE ROLE OF RESEARCH AND INNOVATION

19. **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.**

All aspects of the system will need significant investment to maximise efficient use of resources and minimise risk in a globally changing environment – from all parts of the continuum, to social and community engagement, the use of new technologies, including digital and cloud-based technologies (e.g., genome based diagnostics, remote diagnostic capabilities) and UAVs, to new pest control technologies, including biological and non-chemical. There also a need to research new and emerging risks eg. The evolution of subspecies and pathotypes of pathogens such as the *Liberibacter* complex and *Xylella* subspecies.

**20. How can coordination of biosecurity-related research and innovation activities be improved?**

Schedule 8 of IGAB starts to articulate the importance of nationally effective and efficient research and innovation. To this end, national co-ordination is paramount: it reduces competition, duplication and administration and maximises efficient and effective use of resources, from basic research to delivering real impact for end-users and beneficiaries. The Plant Biosecurity CRC and previously the CRC for National Plant Biosecurity has played a critical role in co-ordinating research in areas of cross-sectoral interest (diagnostics tools) and where 'market failure' exists in the agricultural and environmental innovation system (e.g., the environment, post-harvest grains).

The PBCRC will end in 2018. As part of our Commonwealth Agreement, the PBCRC has a commitment to develop an improved national RD&E system for Australia by the time our funding ceases in 2018. In the last 18 months we have undertaken a project investigating 'A Sustainable and nationally co-ordinated plant biosecurity R,D&E system for Australia' ([www.plantbiosecuritycrc.com.au/smartbiosecurityscience](http://www.plantbiosecuritycrc.com.au/smartbiosecurityscience)).

The consultations have identified there is overwhelming stakeholder support for an enduring single entity to provide national leadership with the following principles:

- Have the authority to deliver on an agreed strategic direction
- Involve significant Commonwealth Government investment to guarantee collaboration
- Be cross-sectoral and cover the full biosecurity continuum
- Close partnerships with industry, government and research providers which is vital in delivering biosecurity research
- Have strong international linkages
- Evolve without duplication in order to achieve outcomes
- Be agreed and actioned immediately

The PBCRC is continuing to lead consultations and is aiming to provide a recommendation to government on a sustainable and nationally co-ordinated plant biosecurity R, D&E system for Australia in October 2016.

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

There are many well documented examples of innovation, including in the areas of remote microscopy, digital and genome-based diagnostics, remote sensing and new treatment technologies for imported and exported produce. For examples from the PBCRC, see [www.pbcrc.com.au/communications/year-in-review-2015](http://www.pbcrc.com.au/communications/year-in-review-2015).

**Measuring the performance of the national biosecurity system**

22. -

**23. 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?**

Accurate data on pest interceptions from imported products is a fundamental requirement to effectively manage a national biosecurity system. The Commonwealth could establish a set of standards for quality data collection that is agreed to and complied with by the states. The implementation of these standards would need to be supported through funding and training and should be coordinated by the Department.

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

There are a range of industry programs collecting biosecurity data including private agronomists, grain handlers, storage providers and exporters. There is potential in the future to negotiate with industry service providers to include such data in the national system, particularly where it also records nil detections of pests to substantiate national or regional pest freedoms. Future data collection methods could include smart traps, robotic/digital sentinels, UAVs, citizen science and social media.