

National Environmental Biosecurity Response Agreement

Five Year Review

Final Report - May 2017





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Executive summary

Background and Purpose of this Report

The responsibility to protect Australia from potentially damaging incursions of diseases and pests is shared between Commonwealth and State and Territory jurisdictions. Shared responsibility between governments is formalised through the Intergovernmental Agreement on Biosecurity (IGAB). Arrangements for national responses to biosecurity incidents are established by inter-jurisdictional agreements, including the National Environmental Biosecurity Response Agreement (NEBRA) which sets out a framework for responding to national biosecurity incidents where there are predominantly public, rather than private benefits.

KPMG have been engaged to consult with government and nongovernment stakeholders nationally to support the review of NEBRA.¹

Submissions were invited from interested parties, and face-to-face consultations occurred across every jurisdiction. Non-government stakeholders ranged from large advocacy groups representing industry and the community through to single issue, small membership environmental groups acting in their local area.

The views presented were as diverse as the stakeholders. Many non-government stakeholders had limited awareness of NEBRA but had useful perspectives on environmental biosecurity.

While there have been some positive achievements from the application of NEBRA, stakeholders have identified practical challenges with its day-to-day operation. This report highlights the key challenges, recommending potential improvements to the agreement in order to address them.

Key Observations

Biosecurity leadership

In most jurisdictions, it is the agriculture agency which leads biosecurity management for both agricultural and environmental pests and diseases. This leads to the perception, real or not, that the application of NEBRA is industry focussed and not truly applied for the benefit of the environment. More active participation from environment agency representatives in the operation of NEBRA would ensure the environmental protection focus of the agreement is a strong factor, and also visible, in decision making.

Stakeholder awareness

Improving general awareness of the agreement's existence and understanding of its operation is also important. The limited awareness of NEBRA within key interest groups, and across the community more generally, potentially reduces non-government participation in environmental biosecurity responses.

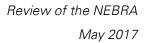
Decision making

Greater transparency around NEBRA decision making will support education efforts and enhance community understanding of how environmental policy objectives are addressed under the agreement. More consistent use of language across NEBRA and the broader IGAB will facilitate clear messaging from biosecurity agencies to stakeholders and the public.

Priority lists

Diverse views were provided to this review in relation to the preparation and management of NEBRA responses. Developing lists of high risk pests and diseases to support decision making was an area of some contention. While lists may provide assistance in fast-tracking responses, their development is resource intensive and problematic in practice. This is due

¹ This report adopts the language of the draft IGAB review of 'system participants' which includes the Australian Government, State and Territory Governments, Local Government, Industry, General Community and Non-Government Organisations.





to the large number of potential pest and disease candidates, the lack of certainty regarding the likelihood of an incursion and, if it occurred, how these pests and diseases may impact the Australian environment.

Transition to Management

The inclusion of Transition to Management provisions within NEBRA and the focus of the agreement exclusively on eradication also exercised considerable debate among stakeholders. There is a strong case to be made for including a Transition to Management phase within NEBRA. Expanding the scope of the agreement to include containment in some limited circumstances where it is difficult to demonstrate the feasibility of eradication also needs to be given consideration. Notwithstanding, it may not be appropriate for containment to lie within the revised NEBRA.



Recommendations

Recommendation 1

The language used in the NEBRA to describe stakeholders should be consistent with that used in the broader IGAB and the other biosecurity response agreements (EADRA and EPPRD).

Recommendation 2

The Commonwealth Department of Agriculture and Water Resources (DAWR) should remain as the custodian of NEBRA. If, following the IGAB Review, a new entity is created with responsibility for environmental biosecurity, consideration should be given to the role the entity should play in relation to NEBRA custodianship.

Recommendation 3

National Biosecurity Management Group meetings should be co-chaired by an executive from the Commonwealth Department of Environment and Energy (DEE), potentially the Chief Environmental Biosecurity Officer if that position is created following the IGAB Review.

Recommendation 4

NBMG members should undertake formal consultation with their environment agency counterparts in each jurisdiction prior to any substantive decision being made under the NEBRA.

Recommendation 5

The NEBRA custodian role should be enhanced to support a maturing NEBRA. Areas of focus should include greater public transparency around decision making, greater support for the development of interpretative guides, enhanced communication with non-government stakeholders and general co-ordination of stakeholder activity. An enhanced custodian role would require a greater level of resourcing for the NEBRA custodian role.

Recommendation 6

The NEBRA Administrative Group formed for the purpose of guiding this review should be instituted as an ongoing body to enable the states and territories to support and engage with an enhanced NEBRA custodian. It would also facilitate continuity of oversight and allow for feedback to the custodian in a structured manner.

Recommendation 7

A summary of decisions made by NBMGs on whether or not to apply NEBRA should be made publicly available in a timely manner to encourage wider understanding of the operation of the agreement.

Recommendation 8

The NEBRA should be re-drafted around four phases to a response: Incident Definition, Emergency Response, Proof of Freedom and Transition to Management (consistent with EPPRD). The commencement of each phase should require separate approval by NBMG of a phase plan in order to limit the scope of cost-shared activity.

Recommendation 9

Analysis and documentation conducted during the Incident Definition Phase should be eligible for cost sharing contingent on an initial assessment by NBMG of the likelihood that an incident will meet NEBRA criteria and approval of an Incident Definition Plan.

Recommendation 10

The NEBRA should be re-drafted to allow for a time-limited (12 month) cost-shared Transition to Management phase. This Transition to Management phase could follow on from an Emergency Response Phase where eradication has been determined no longer to be possible.



Recommendation 11

The feasibility of conducting a five-yearly test of preparedness for the unique challenges posed by an environmental biosecurity response under NEBRA should be considered by the National Biosecurity Committee.

Recommendation 12

Meeting and decision making protocols in NEBRA should be redrafted to reflect that:

- The NBMCC provides technical and expert advice to the NBMG, it does not make decisions and its meetings should not involve voting. If Members of the NBMCC hold different views all views should be incorporated into the written advice to the NBMG.
- Voting membership of the NBMG should be limited to parties who will be contributing to a cost-shared response. Jurisdictions who are not potentially affected by a pest or disease or who have indicated that they do not intend to contribute to a cost-shared response should be Non-voting members of the NBMG for decisions regarding that pest or disease.
- All decisions of the NBMG should need to be made unanimously between Voting members.
- Where attendance at NBMG meetings is delegated, the jurisdiction must enable that delegate to make decisions during the meeting.

Recommendation 13

The NEBRA should be amended to allow any system participants to seek approval to participate in NBMG meetings as voting members if the system participant has made (or will make) significant in-kind or financial contributions to a response in relation to an outbreak. Inclusion of system-participants as voting members should be at the discretion of the other NBMG members.

Recommendation 14

National significance for proposed NEBRA responses should be assessed in line with a broader risk prioritisation framework (such as that

recommended in the draft IGAB report) rather than static criteria for national significance.

Recommendation 15

Benefit-cost analysis requirements and guidance in NEBRA should be revised and simplified to accept qualitative descriptions of benefits where no pre-existing studies on the cost of an outbreak are available.

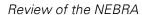
Recommendation 16

The National Biosecurity Committee should consider whether there is sufficient support to revise NEBRA to provide for cost-shared responses aimed at containment in some instances. These instances may include wildlife disease or environmental weeds where it be may be difficult to demonstrate feasibility of eradication but there are net benefits in a national, time-limited containment response. Alternatively, a different mechanism could be developed to facilitate cost sharing arrangements where eradication is not possible, but there are joint benefits to ensuring containment.



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2 Introduction

2.1 Background

Australia's national biosecurity system aims to maintain our favourable pest and disease status and minimise the impact of pests and diseases on Australia's economy, environment and community. This system is underpinned by a number of national frameworks, including the Intergovernmental Agreement on Biosecurity (IGAB), which aims to strengthen the working partnerships between Commonwealth, state and territory governments and improve the national biosecurity system.

The National Environmental Biosecurity Response Agreement (NEBRA) sets out a framework for responding to national biosecurity incidents where there are predominantly public benefits. This includes incursions of exotic pests and diseases in terrestrial and aquatic environments. The NEBRA operates alongside the Emergency Animal Disease Response Agreement (EADRA) and the Emergency Plant Pest Response Deed (EPPRD) which provide a framework for national responses to diseases and pests of production animals and plants respectively. Exotic agricultural weed and aquatic disease response agreements are also in development.

All agreements contribute to the first principle of the IGAB – that biosecurity is a shared responsibility – and help to achieve the second objective of the IGAB – to prepare and allow for effective responses to,

Since it was signed in 2012, five nationally cost-shared eradication responses have been managed through the NEBRA. These include eradication programs for: three separate red imported fire ant incursions in Port Botany, Yarwun and Brisbane Airport; browsing ant in Darwin; and Macao paper wasp on the Cocos (Keeling) Islands.

The recent eradication of red imported fire ants at Yarwun was the first NEBRA program to reach completion. Final surveillance is also underway at Port Botany to demonstrate freedom from red imported fire ants.

Part VIII of the NEBRA requires that a review of the agreement's implementation and effectiveness is conducted within five years of commencement and a report prepared for Commonwealth, state and territory ministers responsible for biosecurity matters. The objective of the NEBRA review is to assess the implementation and effectiveness of the national biosecurity incident response arrangements outlined in the agreement. Once completed, the NEBRA review will inform the future application of the agreement and maximise the capability of Australian governments and non-government stakeholders to manage nationally significant environmental biosecurity incidents.³

A NEBRA Administrative Group has been established for the purpose of managing the review. The Administrative Group is made up of a representative from each of the biosecurity agencies (from state/territory and Commonwealth level of government), as well as the Commonwealth DEE.

The NEBRA Administrative Group engaged KPMG to support this review by conducting consultations, reviewing written submissions and preparing a report detailing recommendations on the future application of the

and management of, exotic and emerging pests and diseases that enter, establish or spread in Australia.²

² NEBRA Administrative Group, *NEBRA Five Year Review Discussion Paper*, December 2016

³ NEBRA Administrative Group, *NEBRA Five Year Review Discussion Paper*, December 2016



NEBRA in order to strengthen Australia's ability to respond to environmental biosecurity threats.

2.2 Terms of Reference

The Terms of Reference for this review which framed KPMG's consultations were to "identify any issues or inefficiencies in current NEBRA processes and facilitate the development of future policies that can better deliver the specified outcomes of the NEBRA". 4 Specifically this was to involve:

- examination of any interconnections and synergies with other response agreements;
- review of the governance structure of the NEBRA;
- assessment of signatory (i.e. Commonwealth, state and territory governments) and stakeholder (e.g. industry bodies, non-government organisations) understanding of their roles and responsibilities under the agreement;
- review of the technical elements of the agreement (Schedules 2, 3 and 4);
- review of the NEBRA decision making processes outlined in Schedules 7 and 8 of the agreement - the process map and the processes actually followed for NEBRA responses to date;
- analysis of the role of the Department of Agriculture and Water Resources (DAWR) in undertaking custodian activities;

- analysis of the effectiveness of response and management activities (e.g. National Biosecurity Management Consultative Committee and the National Biosecurity Management Group);
- evaluation of communication under the NEBRA including National Communication Network, National Biosecurity Committee, NEBRA custodian, secretariats and communication with the general public during a response, and
- evaluation of the role of non-government entities in environmental biosecurity response activities.

2.3 Approach

In order to provide stakeholders with a background on the review the NEBRA Administrative Group developed a Discussion Paper which was made publicly available prior to consultation. A set of 21 guiding questions were detailed in the Discussion Paper and KPMG had a focus on these questions throughout the review, both during consultations and analysis. The questions are detailed in Appendix A.

Following the public release of the Review's Discussion Paper by the Administrative Group, KPMG's scope of work and approach to conducting consultations has been to:

 Hold face-to-face consultation sessions with government and nongovernment stakeholders in every Australian capital city. Jurisdictions (state/territory and Commonwealth) nominated stakeholders for these consultation sessions. A list of the face-to-face consultation sessions and the organisations represented at those sessions is included at Appendix B. A list of other organisations invited to participate in face-

⁴ NEBRA Administrative Group, Request for Consultancy Services NEBRA Five Year Review, October 2016



to-face consultation sessions (who did not attend) is provided at Appendix C.

- Summarise the key themes of face-to-face consultation and provide a brief report to the Administrative Group on those themes.
- Review and analyse written submissions to the review received by the Commonwealth DAWR (on behalf of the Administrative Group) in response to the Discussion Paper. A list of the organisations and agencies who made written submissions is provided at Appendix D.
- Conduct limited supplementary research and consultation into matters raised during face-to-face consultation. Particular areas of enquiry have related to the development of exotic weed and aquatic disease response agreements and analysis of decision making in relation to environmental biosecurity incursions.
- Drafting this report on the basis of consultation and analysis, providing recommendations for the future application of NEBRA.

2.4 Other Reviews

2.4.1 Review of the IGAB

It should be noted that at the time of conducting this review, a review of the broader IGAB was also being conducted. A draft report with recommendations for changes to Australia's biosecurity system was released in December 2016 and submissions from interested parties were being analysed. The draft report contained six recommendations directly

KPMG has been cognisant of the draft IGAB Review recommendations in preparing this report and none of the recommendations of the two reports are in conflict.

2.4.2 Senate Inquiry into Environmental Biosecurity

In May 2015, the Senate Environment and Communications References Committee released a report on its findings on Australia's environmental biosecurity arrangements. That report also contained recommendations either directly relevant to NEBRA or relating to environmental biosecurity more generally.⁶

KPMG has also been cognisant of the Senate Committee's recommendations in preparing this report.

regarding environmental biosecurity and other recommendations with relevance to NEBRA.⁵

⁵ IGAB Independent Review Panel, Intergovernmental Agreement on Biosecurity Review Draft Report, December 2016

⁶ Senate Environment and Communications References Committee, Environmental Biosecurity, May 2015



3 The Current Agreement

Before detailing recommended improvements to NEBRA this section provides some background on the key features of the agreement as it currently operates.

3.1 NEBRA Purpose

The purpose of NEBRA is to "establish national arrangements for responses to nationally significant biosecurity incidents where there are predominantly public benefits". In practice NEBRA is designed to deliver public benefits in relation to the environment; people, including social amenity and human infrastructure; and business activity.

NEBRA details the type of biosecurity incidents that can be responded to under the agreement. It states that a NEBRA response cannot be implemented in relation to an established pest or disease⁹ but that a response could be implemented in relation to "a pest or disease that is a potential threat to an area but is not yet present or widely distributed or being officially controlled". ¹⁰ The combination of these requirements

During consultation for this review KPMG became aware that NEBRA stakeholders (government and non-government) held a variety of views in relation to whether a NEBRA response could be triggered in relation to a 'range expansion' of an established pest or disease. On balance, the view is that it is 'possible' that a NEBRA response may be triggered, but it was considered unlikely that it would receive support beyond the combat jurisdiction.

3.2 NEBRA and Other Biosecurity Response Agreements

A NEBRA response can only be implemented if the "emergency response cannot proceed under pre-existing cost-sharing arrangements". 11 Pre-existing cost sharing arrangements are defined as meaning the EPPRD, the EADRA and national arrangements in the health sector. 12 The pests and diseases addressed by the EPPRD and EADRA are listed in those agreements under four categories which reflect the pest or disease's level of impact on agricultural industries and which are used to determine the level of financial contribution from industry in relation to the cost-shared response.

would seem to indicate that NEBRA responses can be initiated in relation to outbreaks of exotic pests or diseases that are new to Australia, but also to 'range expansions' of pests or diseases that meet the other NEBRA criteria but may not necessarily be new to Australia or even exotic.

⁷ NEBRA, clause 1.1

⁸ NEBRA, clause 1.4(a)

⁹ NEBRA, clause 6.5(b)

¹⁰ NEBRA, clause 6.5(a)(iv)

¹¹ NEBRA, clause 6.5(c)

¹² NEBRA, clause 2.2



There are some key differences between NEBRA and the EPPRD and FADRA:

- Parties to the EPPRD and EADRA include animal and plant industry bodies who have agreed to cost share emergency responses to outbreaks of pests and diseases in accordance with established formulas. There are no non-government parties to NEBRA and NEBRA responses are entirely government funded.
- The EPPRD and EADRA are managed and administered by not-forprofit companies: Plant Health Australia and Animal Health Australia respectively. Plant Health Australia and Animal Health Australia are funded by contributions from Australian governments (state/territory and Commonwealth) and industry members. The NEBRA has no equivalent custodian and is instead managed and administered by a small secretariat within the Commonwealth DAWR.
- The EPPRD includes arrangements for a 'Transition to Management' phase of an emergency response of not longer than 12 months if it is determined that the pest cannot be eradicated and should be managed outside of the EPPRD. 13 The EADRA does not include provision for a 'Transition to Management' phase but describes the 'Emergency Response Phase' involving efforts to eradicate or contain. 14 NEBRA does not include provision for a 'Transition to Management' phase and explicitly excludes containment efforts that are not leading to eradication. 15

In addition to the EPPRD and EADRA, Australian governments (state/territory and Commonwealth) are working with industry partners to develop separate biosecurity response agreements to address diseases of aquaculture and weeds with agricultural production impacts.

NEBRA establishes a decision making structure and 10 step process to be followed in the case of an outbreak of a potentially nationally significant pest or disease. ¹⁶ A flow chart summarising the process is also included in the agreement and is reproduced at Appendix E. In summary the steps are:

- 1) Notifying party becomes aware of an outbreak and uses all reasonable endeavours to contain the pest or disease.
- 2) Notifying party commences risk assessment and decides whether the outbreak can be managed through pre-existing cost sharing arrangements.
- 3) Notifying party notifies the reporting point. It must do so with 24 hours of step 1.
- 4) Parties to the agreement establish a National Biosecurity Management Consultative Committee (NBMCC).
- 5) A National Biosecurity Management Group (NBMG) is convened on the request of any party or the advice of the NBMCC¹⁷.
- 6) NBMCC provides advice to the NBMG in relation to whether the outbreak can be managed under pre-existing cost sharing

^{3.3} NEBRA Decision Making Structure

¹³ EPPRD clauses 5.4, 5.2.4(b)(ii) and 1.1

¹⁴ EADRA, clause 6.2

¹⁵ NEBRA, clause 7.5(a)

¹⁶ NEBRA, clause 6.1

¹⁷ NBMGs are outbreak-specific, that is, a separate NBMG is established for each outbreak.



- arrangements, or if not, whether the pest or disease is nationally significant and likely to be eradicable.
- 7) If the NBMG considers that the pest or disease is nationally significant and likely to be eradicable then the notifying party must prepare a risk analysis, conduct technical feasibility analysis, conduct benefit cost analysis and prepare a draft response plan for NBMCC consideration.
- 8) The NBMCC must advise the NBMG in relation to the response plan.
- 9) The NBMG must determine whether or not to undertake a NEBRA response.
- 10) All NBMG members must agree to the response plan before costsharing arrangements can come into effect.

Other points to note in relation to NEBRA decision making:

- The agreement specifies that each party of the NBMG has a vote on all NBMG decisions, except cost-sharing decisions, regardless of whether or not they are an affected party. In relation to cost-sharing decisions only the Commonwealth, affected parties and cost-sharing private beneficiaries may vote.¹⁸
- NBMG decisions must be made by consensus, meaning that all parties present support a decision. NBMG decisions relating to cost-sharing must be unanimous, meaning that all parties entitled to vote have voted in the same fashion.¹⁹
- NBMCC decisions must be made by consensus.²⁰²¹

3.4 NEBRA National Significance Criteria

Outbreaks of pests or diseases need to meet national significance criteria to be eligible for a cost shared response under NEBRA. Criteria relate to the pest or disease's impact on:

- The Environment further sub-criteria are detailed under the headings of nationally important species; ecologically valuable species; nationally important places; ecologically important places; and extensive impacts.²²
- People, including social amenity and human infrastructure further sub-criteria are detailed under the headings of impacts on human infrastructure; impacts on social amenity; and cultural impacts.²³
- Business Impacts with the caveat that pests or diseases impacting predominantly on primary production or human health should be dealt with under EPPRD, EADRA or national arrangements in the health sector.²⁴

¹⁸ NEBRA, Schedule 7, clause 5

¹⁹ NEBRA, Schedule 7, clause 5

²⁰ NEBRA, Schedule 8, clause 5

²¹ Consensus is defined in the NEBRA as "all of the parties present support a decision. This includes not abstaining when a particular issue is considered".

²² NEBRA, Schedule 3, clause 2

²³ NEBRA, Schedule 3, clause 3

²⁴ NEBRA, Schedule 3, clause 4



3.5 NEBRA Feasibility of Eradication Criteria

The NBMG must consider whether it is technically feasible to eradicate a pest or disease when deciding whether to undertake a NEBRA response.²⁵ The agreement specifies 17 sub-criteria which must be considered when evaluating the technical feasibility of eradicating a pest or disease.²⁶

3.6 NEBRA Benefit-Cost Criteria

The NBMG must consider whether it is cost-beneficial to undertake a NEBRA response. A high-level framework for conducting the benefit-cost analysis is provided in the agreement but it does not mandate specific environmental valuation techniques or methodologies. 8

3.7 Cost Sharing Arrangements

The NEBRA sets out cost sharing arrangements for NEBRA responses. In summary, the cost of NEBRA responses are funded 50 per cent by the Commonwealth and the remaining 50 per cent by the states and territories. A state or territory's contribution is calculated with reference to its proportion of the total number of people potentially affected by the pest or disease. The exact manner of that calculation is determined by modelling of the potential geographic distribution of the pest or disease across Australia, based on climatic suitability. The summary of the potential geographic distribution of the pest or disease across Australia, based on climatic suitability.

NEBRA specifies the type of costs that are eligible for cost sharing.³¹ NBMGs may commit up to \$5 million per financial year towards NEBRA responses. If the \$5 million is exceeded the relevant NBMGs must seek Ministerial approval from all parties to continue activities or begin new emergency responses.³²

As an acknowledgment of the complexity of identifying private beneficiaries for public-good biosecurity responses and quantifying their appropriate financial input, NEBRA specifies that private beneficiary financial contributions should be considered on a case by case basis rather than establishing set formulas.³³

²⁵ NEBRA, clause 6.1

²⁶ NEBRA, Schedule 4, clause 4.2

²⁷ NEBRA, clause 6.1

²⁸ NEBRA. Attachment 4A

²⁹ NEBRA, clause 7.2(d)

³⁰ NEBRA, Attachments 5A to 5E

³¹ NEBRA, Schedule 5

³² NEBRA, clause 7.8

³³ NEBRA, clause 7.9



4 Findings and Recommendations

4.1 Roles and Responsibilities

One of the key focus areas for this review, identified in both the NEBRA Review Discussion Paper and Terms of Reference, has been to assess stakeholder understanding of their roles and responsibilities under the NEBRA. The Discussion Paper takes this issue further and asks for suggestions to increase the role of private beneficiaries and nongovernment stakeholders in relation to NEBRA decision making, responses, and preparedness. This section deals exclusively with government stakeholders' understanding of their roles and responsibilities. Subsequent sections detail recommendations intended to enhance active participation of non-government stakeholders.

KPMG consultation and analysis of written submissions identified that the roles of government stakeholders detailed in clauses 4, 5 and 6 of the NEBRA are generally well understood: states and territories retain primary responsibility for the emergency management of outbreaks; but where an outbreak is determined to be nationally significant, and a response

Non-government stakeholders are far less aware of NEBRA (see also 3.3 – NEBRA Communication). Unlike the EADRA and EPPRD, there are no industry signatories to NEBRA who would normally contribute financially to a response, when affected. Consultation has indicated that industry stakeholders for environmental biosecurity are less directly affected than in agriculture and more difficult to identify in relation to specific outbreaks.

The NEBRA itself provides little role for non-government stakeholders. The most significant provisions for their role relate to the potential for 'affected stakeholders' to have a representative on NBMCCs as an observer³⁴, for financial contributions to be sought from 'private beneficiaries' on a case by case basis³⁵, and for 'private beneficiaries' to be voting members of an NBMG if they are contributing to the cost of a response³⁶.

During consultation, KPMG found that the language that is sometimes used by government to describe non-government stakeholders to NEBRA can be divisive. Industry stakeholders in particular reacted negatively to being described as 'private beneficiaries' or 'risk creators' and tended to see that language as being a prelude to 'cost-shifting' environmental biosecurity from government to industry. In this respect KPMG agrees with the commentary in the Draft IGAB Review that the term 'system participants' would be a better way of describing stakeholders. The Draft IGAB Review further categorises 'system participants' as being the Australian Government, State and Territory Governments, Local Government, Industry, General Community and Non-Government Organisations and seeks feedback on a set of draft roles and responsibilities.

determined to be technically feasible and cost-beneficial, NEBRA provides a mechanism to share the cost of the response between jurisdictions.

³⁴ NEBRA, Schedule 8, Clause 4.2(c)

³⁵ NEBRA, clause 7.9

³⁶ NEBRA, Schedule 7, Clause 4.3(b)

³⁷ IGAB Independent Review Panel, Intergovernmental Agreement on Biosecurity Review Draft Report, December 2016, page 10



Recommendation 1

The language used in the NEBRA to describe stakeholders should be consistent with that used in the broader IGAB and the other biosecurity response agreements (EADRA and EPPRD).

4.2 NEBRA Custodianship

Unlike the EADRA and EPPRD, there is no dedicated independent body to act as custodian for NEBRA (see also 2.2 – NEBRA and Other Biosecurity Response Agreements). The Commonwealth DAWR fulfils the custodian role for the NEBRA. Key functions of the custodian role include "providing policy advice to signatory parties, implementing the cost-share formula on behalf of combat jurisdictions, co-ordinating financial re-imbursement claims for NEBRA responses and disseminating information related to NEBRA responses". ³⁸

This review identified a range of views in relation to NEBRA custodianship. The Invasive Species Council, one of the few non-government entities with a relatively strong understanding of the NEBRA, submitted that the NEBRA requires an independent custodian to perform the role that Animal Health Australia (AHA) and Plant Health Australia (PHA) perform for the EADRA and EPPRD respectively. The Invasive Species Council submitted that an independent custodian is needed to "undertake the work necessary to better prepare Australia to respond to outbreaks of environmental pests and diseases, including the identification of priority risks and development of contingency plans". ³⁹ The Biosecurity Council of Western Australia expressed a similar view in stating that someone

needs to 'own' NEBRA to drive environmental biosecurity in the way that AHA and PHA drive the EADRA and EPPRD.

Not all non-government stakeholders supported the creation of a new custodian for NEBRA. Wildlife Health Australia, another organisation outside of government with relatively high awareness of NEBRA, submitted that they were supportive of DAWR's continuation in the custodian role, particularly until broader arrangements for environmental biosecurity are settled following the IGAB Review.

During consultation some state and territory jurisdictions expressed concern about Commonwealth DAWR's ability to act as an impartial NEBRA custodian when it is potentially a combat state in its own right and a major contributor to cost-sharing. Concerns were also expressed about the level of resourcing that DAWR has made available for the custodian role.

In the Commonwealth's submission, DAWR and the Department of Environment and Energy noted that DAWR had limited funds available for the custodian role and supported "consideration of mechanisms by which other NEBRA signatories could support or contribute to the NEBRA custodian role". DAWR also stated that it is committed to the NEBRA custodian role.

Over the course of this review KPMG has not seen any evidence to suggest that the creation of an independent custodian would attract significant funding from any parties other than the Commonwealth and state and territory governments. Creating a new entity to act as custodian for the NEBRA has the potential to raise the cost of NEBRA custodianship (through increased organisational overheads) and further fragment the national biosecurity system by separating NEBRA custodianship from DAWR, who, presumably, would retain responsibility for funding the

³⁸ Commonwealth Department of Agriculture and Water Resources and Department of the Environment and Energy submission

³⁹ Invasive Species Council submission



Commonwealth's proportion of national environmental biosecurity responses.

KPMG therefore does not recommend that a new body be created specifically to act as custodian for the NEBRA. However if, following the IGAB Review, a new entity is created with responsibility for environmental biosecurity, consideration should be given to the role the entity should play in relation to NEBRA custodianship.⁴⁰

KPMG consultation has indicated that, five years after the commencement of the NEBRA, there is a need to strengthen the NEBRA custodian role. Stakeholders advised KPMG that a maturing NEBRA requires additional supports including:

- greater public transparency around decision making (see Recommendation 7);
- greater support for the development and maintenance of interpretative guides for decision making (see particularly the South Australian Government's submission on this point), as well as other material to support decision making, for example development of case studies that provide examples of the implementation of the NEBRA;
- enhanced communication and liaison with non-government stakeholders to promote awareness of the agreement and thus potentially greater in-kind or financial support for future responses (see Recommendation 13); and
- greater emphasis on the maintenance of stakeholder lists and general co-ordination of stakeholder activity.

One of the questions posed in the NEBRA Review Discussion Paper was whether the NEBRA Administrative Group formed to guide this review (with a member from each signatory jurisdiction) should be maintained on an ongoing basis. This question was not directly addressed in most

written submissions but would seem like an obvious way for states and territories to support the Commonwealth in relation to its custodian role. This support could involve contributing to the development of interpretative guides and participating in knowledge sharing in relation to the initiation of NEBRA responses.

Without continuation of the Administrative Group, there is potentially no ongoing governance over the operation of NEBRA (in contrast to the Animal Disease and Plant Pest agreements). As NBMG are only constituted when an incursion occurs, there are potentially no meetings of the senior officers responsible for the implementation and application of NEBRA. KPMG consider that there would be significant governance value in retaining the group to meet once each year, or more often if required. This would enable continuity of oversight, provide a forum for feedback on operations and custodianship, as well as provide a mechanism to test communications prior to release.

KPMG recognises that governments have been seeking to streamline the number of inter-governmental committees, and to make them project-based and time limited wherever possible. Such moves are intended, at least in part, to reduce the burden of such arrangements on smaller jurisdictions. However, given the importance of ensuring coordinated preparedness activities and the additional supports outlined above, KPMG does not consider improving governance through a small number of teleconferences to be a substantial burden.

Another concern expressed to KPMG, particularly by non-government stakeholders during consultation, was that they considered DAWR's custodianship of the NEBRA tended to emphasise the agricultural aspects of biosecurity to the detriment of environmental perspectives. The current lack of transparency relating to the basis of decisions under the NEBRA

⁴⁰ The draft report of the IGAB review has recommended the establishment of a Chief Environmental Biosecurity Officer to sit within the Commonwealth environment department.



(which is addressed in Recommendation 7) is likely to be contributing to these concerns.

This perception of an agricultural emphasis is further exacerbated by the fact that the Chair of the NBMG has generally been a DAWR executive and voting membership from states and territories has largely been drawn from agriculture agencies.

Agriculture agency leadership of the management of NEBRA is understandable because governments have assigned responsibility for broader biosecurity to agriculture agencies (except in Tasmania where there is currently a joint agriculture and environment agency (albeit with two different ministers) and in the ACT where agriculture sits within the environment agency). However, greater involvement by environment agencies would aid agriculture agencies in the prioritisation of environmental biosecurity responses. In their submission to this review the New South Wales Government noted that "there is a gap in environmental agency funding specific to NEBRA activity and there is also an opportunity for the Commonwealth DEE to be more engaged with state environmental departments". It would be beneficial if environment agencies of all jurisdictions were more actively engaged and formally consulted in relation to NEBRA decision making. A formal consultation requirement would go some way to demonstrating to non-government stakeholders that environmental policy objectives are taken into consideration in NEBRA decision making.

Recommendation 2

The Commonwealth DAWR should remain as the custodian of NEBRA. If, following the IGAB Review, a new entity is created with responsibility for environmental biosecurity, consideration should be given to the role the entity should play in relation to NEBRA custodianship.

Recommendation 3

NBMG meetings should be co-chaired by an executive from the Commonwealth Department of Environment and Energy (DEE), potentially the Chief Environmental Biosecurity Officer if that position is created following the IGAB Review.

Recommendation 4

NBMG members should undertake formal consultation with their environment agency counterparts in each jurisdiction, prior to any substantive decision being made under the NEBRA.

Recommendation 5

The NEBRA custodian role should be enhanced to support a maturing NEBRA. Areas of focus should include greater public transparency around decision making, greater support for the development of interpretative guides, enhanced communication with non-government stakeholders and general co-ordination of stakeholder activity. An enhanced custodian role would require a greater level of resourcing for the NEBRA custodian role.

Recommendation 6

The NEBRA Administrative Group formed for the purpose of guiding this review should be instituted as an ongoing body to enable the states and territories to support and engage with an enhanced NEBRA custodian. It would also facilitate continuity of oversight and allow for feedback to the custodian in a structured manner.

4.3 NEBRA Communication

There are three distinct elements to NEBRA Communication: communication between government biosecurity agencies around NEBRA; communication between biosecurity agencies and their colleagues in the rest of government; and communication between



government and industry, non-government organisations and the general community.

4.3.1 Communication between Biosecurity Agencies

KPMG's consultation indicated that communication between biosecurity agencies on NEBRA issues was effective but based on professional relationships and informal channels rather than formal structures. Stakeholders advised KPMG that for demographic reasons there is likely to be significant turnover at the senior levels of biosecurity agencies in coming years. Consequently, there is a need for more structured and formal collaboration arrangements through an ongoing NEBRA forum. See Recommendation 6.

4.3.2 Intra-Government Communication

During consultation KPMG noted that some jurisdictions (NSW in particular) have robust arrangements in place to engage their whole apparatus of government in emergency biosecurity responses (including those under NEBRA). However, two-way communication between biosecurity agencies and other agencies within the same jurisdictions could be strengthened. It is particularly important that environment agencies are engaged in the decision making process around the application of NEBRA. See Recommendations 3 and 4.

4.3.3 Communication with Industry, Non-Government Organisations and the General Community

KPMG's consultation for this review quickly revealed that the level of awareness of NEBRA outside government is extremely low and almost exclusively limited to non-government organisations who are actively engaged with government (such as the Invasive Species Council and Wildlife Health Australia) and some well-informed agriculture and aquaculture industry groups whose businesses could be directly threatened by biosecurity incidents.

Even within these relatively well informed groups there was a very low level of awareness of the outbreaks for which the NEBRA had been applied and, perhaps more importantly, outbreaks which had been considered for a response under NEBRA but which were not judged to have met the criteria. However, there was some evidence of practical collaboration between government and non-government organisations to address biosecurity risks outside the NEBRA context (several examples were provided in both South Australia and New South Wales).

During this review KPMG engaged with the NEBRA secretariat in DAWR to obtain a list of outbreaks for which the application of NEBRA had been considered. This list was not publicly available.

Almost every stakeholder, both government and non-government, who made a written submission to this review or participated in a consultation session agreed that there is a need for greater transparency around NEBRA decision making. It is evident that the low level of transparency that is currently a feature of NEBRA has been predominantly a result of limited resourcing (see also 3.2 – NEBRA Custodianship).

The potential benefits of greater transparency include:

- raising awareness of environmental biosecurity issues which may act as a prompt for more extensive and better informed surveillance by industry and community groups;
- creation of an opportunity for stakeholders to contribute to environmental biosecurity arrangements in an informed way (e.g. by considering NEBRA criteria and whether they will address biosecurity threats);
- increased stakeholder confidence that governments are managing environmental biosecurity; and
- providing a resource for biosecurity agencies to understand what kind of outbreaks have met (or have not met) NEBRA criteria in the past.



There is also the potential that increased scrutiny that is likely to accompany greater transparency will present its own resource demands. For that reason the aim of enhanced transparency should be to provide a level of information that is informative without exposing every level of assessment to intensive examination.

Recommendation 7

A summary of decisions made by NBMGs on whether or not to apply NEBRA should be made publicly available in a timely manner to encourage wider understanding of the operation of the agreement.

4.4 NEBRA Management

4.4.1 Phases of a Response

KPMG consultations and written submissions have indicated that the preresponse requirements of NEBRA (through which the combat jurisdiction must contain the outbreak while preparing NEBRA analyses and documentation for decision making) and the incorporation of a transition to management phase (see section 2.2 for background) provoke considerable discussion and differing views.

With respect to pre-response requirements, the NEBRA requires that combat jurisdictions meet the initial expenses of containing an outbreak, preparing risk assessments, preparing assessments of national significance, feasibility of eradication and benefit-cost analyses. These costs can be reimbursed to the combat jurisdiction under agreed cost-sharing arrangements if a NEBRA response is later approved.

Small jurisdictions expressed concern about their ability to complete the analysis and documentation required to initiate a NEBRA response while simultaneously working to contain an outbreak:

- South Australia submitted that "jurisdictions face significant costs in the early stages of an environmental biosecurity event before the NEBRA criteria can be addressed".
- Tasmania submitted that the "pre-response burden falls entirely on the combat jurisdiction. If the response doesn't go ahead then that jurisdiction is unable to recover costs, although it may have been reasonable to approach it as if it were nationally significant".
- Northern Territory submitted that "delivery of responses is particularly difficult for small jurisdictions. This is especially so during the period before the final decision on approving a national response, when staff and resources are required to take immediate on-ground action in response to an incursion, while simultaneously conducting preresponse activities and preparing documentation for a NEBRA response".

Conversely, both New South Wales and the Commonwealth maintained that pre-response activities are the responsibility of each jurisdiction under their normal commitments and that NEBRA should remain focussed on cost-sharing for nationally significant eradication efforts.

Unlike the NEBRA, responses under the EADRA and EPPRD are designed around explicit phases. The EADRA features an Incident Definition Phase, an Emergency Response Phase and a Proof of Freedom Phase. The EPPRD features these three phases but also includes a (12 month) Transition to Management Phase which may follow a determination that eradication of the outbreak is no longer feasible. Expenses incurred during the Incident Definition Phase under EADRA and EPPRD are met by the

⁴² NEBRA, Schedule 5, clause 2.3(a)

⁴¹ NEBRA, Schedule 5, clauses 2.1 and 2.2



combat jurisdiction but may be reimbursed under agreed cost sharing arrangements if a response is approved.⁴³

In addressing this issue it is probably useful to separate containment from the analysis and documentation required to initiate a NEBRA response. It seems clear that expanding the NEBRA to include cost-sharing for containment would change the nature of the agreement and not be supported by all signatories. However, cost-shared containment in some circumstances should be considered even if the mechanism sits outside of NEBRA (see also section 3.6.3).

It is also clear that preparing assessments and documentation for outbreaks that have predominantly environmental impacts is more challenging than for agricultural outbreaks because the pest or disease is often unknown (or little known) and its potential impact on an environment unpredictable⁴⁴. In their submissions New South Wales, the Commonwealth and the National Farmers Federation expressed concern about NEBRA criteria (which require a level of certainty in relation to an outbreak) and the limited evidence base available on new and emerging environmental biosecurity threats.

With respect to Transition to Management, EPPRD allows for a Transition to Management phase while EADRA and NEBRA do not. In submissions to this review New South Wales and the Commonwealth expressed cautious, in principle support for the inclusion of a Transition to Management Phase in NEBRA while the Northern Territory opposed the concept on the basis that it may weaken universal support for the agreement.

During consultation a number of parties expressed concern to KPMG that if NEBRA does not contain explicit Transition to Management provisions then transition activities will likely still be funded as part of the final stages

For these reasons KPMG makes the following recommendations:

Recommendation 8

The NEBRA should be re-drafted around four phases to a response: Incident Definition, Emergency Response, Proof of Freedom and Transition to Management (consistent with EPPRD). The commencement of each phase should require separate approval by NBMG of a phase plan in order to limit the scope of cost-shared activity.

Recommendation 9

Analysis and documentation conducted during the Incident Definition Phase should be eligible for cost sharing contingent on an initial assessment by NBMG of the likelihood that an incident will meet NEBRA criteria and approval of an Incident Definition Plan.

Recommendation 10

The NEBRA should be re-drafted to allow for a time-limited (12 month) cost-shared Transition to Management phase. This Transition to Management phase could follow on from an Emergency Response Phase where eradication has been determined no longer to be possible.

4.4.2 Preparedness

The NEBRA specifies that it is a state and territory responsibility to "maintain preparedness arrangements, including capacity and capability, to enable timely emergency responses to incidents of nationally significant pests and diseases". ⁴⁵ In its written submission to this review New South

the undescribed nature of Australian biodiversity also introduces difficulty to the completion of risk assessments for outbreaks.

45 NEBRA. clause 5.3(b)

of an emergency response. Given this, it would be preferable if a transparent plan for transition activities was a feature of the NEBRA.

⁴³ EPPRD clause 9.1 and EADRA clause 10.1

⁴⁴ See for example the Australian Museum's submission to this review in which they noted that much of Australia's biodiversity remains undescribed. Their comment was made in relation to the difficulties of identifying threat species but



Wales expressed concern that not all jurisdictions are equally well placed to meet their commitments under NEBRA and advised KPMG of work that is being undertaken under IGAB to develop a performance framework, measures and auditing process for jurisdictions' normal commitments.

Assessment of general preparedness for an environmental biosecurity outbreak relates to the broader IGAB and is outside the scope of this review. However, KPMG understands that there has not yet been a national exercise to test the arrangements that would underpin a NEBRA response such as those that are conducted to test preparedness for animal or plant outbreaks. The DAWR website notes a key part of its work to minimise the impact of diseases and pests more broadly is conducting and participating in exercises that help both government and industry to be better prepared for, and able to respond to threats of exotic pests and diseases. ⁴⁶ Moreover, it is common practice to test emergency arrangements for other hazards such as terrorism and natural disasters through exercises.

It should be noted that responses under NEBRA pose unique challenges including the lack of identified industry partners, an infinitely more diverse asset base to protect (the environment rather than a small number of plant or animal species) and a potentially larger geographic area. However, a readiness test or exercise would provide an opportunity to assess preparedness and provide stakeholders with assurance that jurisdictions are ready to respond to potential incursions. It could also be used as an education exercise, creating publicity and increased understanding with stakeholder groups and the broader community.

Recommendation 11

The feasibility of conducting a five-yearly test of preparedness for the unique challenges posed by an environmental biosecurity response

4.5 Governance and Decision Making

4.5.1 Procedural Matters

The ten-step decision making process is set out in clause 6 of the NEBRA. A graphical depiction of this process is included in Schedule 1 of the agreement and is reproduced in Appendix E of this report. In addition, Schedules 7 and 8 of the NEBRA outline the terms of reference, membership and decision making protocols for the NBMG and NBMCCs respectively.

Within the meeting protocols the terms 'consensus' and 'unanimous' are used extensively.

In the NEBRA 'consensus' is defined as meaning:

that all of the parties present support a decision. This includes not abstaining when a particular issue is considered.

It was brought to KPMG's attention during consultation that this definition is inconsistent with that used in the Agriculture Ministers' Forum and Agriculture Senior Officials Committee handbook and the NEBRA Review Discussion Paper⁴⁷ which define consensus as meaning that all voting parties support a decision.

under NEBRA should be considered by the National Biosecurity Committee.

⁴⁶ http://www.agriculture.gov.au/biosecurity/emergency/exercises accessed 20 May 2017

⁴⁷ NEBRA Administrative Group, *NEBRA Five Year Review Discussion Paper*, December 2016, pages 3 and 6



In their joint submission to this review the Commonwealth DAWR and DEE pointed out that the NEBRA clauses relating to NBMCC composition and meeting protocols⁴⁸ discuss voting and decision making by consensus but that this is inconsistent with the NBMCCs Terms of Reference which centre on providing technical and expert advice to the NBMG⁴⁹. It is the NBMG that makes decisions on the application of the NEBRA.⁵⁰

The Commonwealth joint submission also expressed concern that clause 6.7(e)(v) of the NEBRA states that:

a national biosecurity incident response will not commence if the NBMG has not reached a consensus that a national biosecurity incident response should commence.

The Commonwealth submitted that this clause provides any party the power to veto action under NEBRA. In contrast, Tasmania submitted that they were concerned the provision of decision making authority only to jurisdictions who would be party to cost-sharing arrangements potentially creates precedents which may later bind other jurisdictions. For example, if one jurisdiction applies a particular benefit-cost approach or risk assessment methodology, it could create the expectation that that will be replicated in future, regardless of jurisdiction. This will not always be appropriate or possible. However, decisions with regard to a particular incursion should not create binding precedence on future decision making. It should be noted that NEBRA is not a legally binding agreement and that non-voting members can participate and make their views heard in NBMG meetings.

The Commonwealth also submitted that there is a lack of clarity within the NEBRA in relation to NBMG meeting protocols and voting. In particular the Commonwealth submitted that the clauses that allow <u>all</u> NBMG members to vote on decisions except cost-sharing decisions and the clauses that provide that only <u>affected</u> parties can vote on cost-sharing decisions⁵¹ are unclear and do not necessarily achieve their presumed

intent of only allowing financially contributing parties to vote on costsharing decisions.

During research and analysis KPMG found that these definitional and procedural issues are interrelated. In clarifying them, it is useful to articulate the principles on which NEBRA decision making is based. KPMG's understanding of these principles is that:

- 1 The NBMCC is a technical advisory body that provides advice to allow the NBMG to make decisions on NEBRA criteria. It is not a decision making body.
- 2 NBMG decision making that has cost sharing implications should be limited to the parties who will be contributing to cost-sharing.
- 3 Delegates attending NBMG meetings must have decision making authority, so as not to delay processes.

The NEBRA does not define what kind of decision is a decision about costsharing and what kind of decision is not. In reality, any decision about the application of NEBRA criteria (such as national significance or technical feasibility of eradication) is a decision about cost-sharing because a costshared response will only proceed if these criteria are met.

Furthermore, KPMG has found that if NEBRA's decision making protocols more clearly reflected principle 2 (above) then the separate definitions of 'unanimity' and 'consensus' would be unnecessary.

The decision making protocols in NEBRA should be clarified and streamlined. In conducting background research for this review KPMG obtained a list of outbreaks which had been considered (at some level) for the application of NEBRA. KPMG has depicted the decision making outcomes for these outbreaks in Diagram 1.

⁴⁸ NEBRA, Schedule 8, clauses 4 and 5

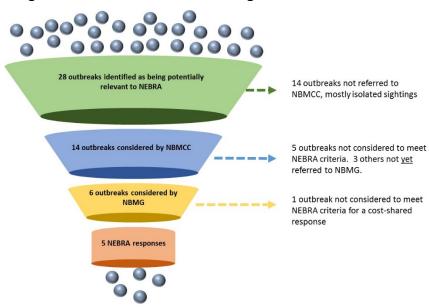
⁴⁹ NEBRA, Schedule 8, clause 2

⁵⁰ NEBRA, Schedule 7, clause 2

⁵¹ NEBRA, Schedule 7, clause 4.3(b), clause 5(c) and clause 5(e)



Diagram 1: NEBRA Decision Making



Of the 28 outbreaks that the NEBRA secretariat understands were potentially relevant to NEBRA, 14 were not taken further by relevant agencies, mostly because they were isolated sightings that were either dealt with immediately or for which no further action could be taken (e.g. single sightings of a squirrel or bird that could not be captured).

Of the 14 outbreaks considered by NBMCCs, only six have so far been referred to NBMGs. KPMG were advised that five of these were not progressed because the NBMCC did not consider they met NEBRA criteria. However, the NBMCC is not a decision making body and under NEBRA processes should not make decisions to take no further action. The NBMCC is an advisory body, and instead should be making information and recommendations to NBMG. The lack of clarity in NBMG and NMBCC protocols may have contributed to this departure from procedure.

Recommendation 12

Meeting and decision making protocols in NEBRA should be redrafted to reflect that:

- The NBMCC provides technical and expert advice to the NBMG, it does not make decisions and its meetings should not involve voting. If Members of the NBMCC hold different views all views should be incorporated into the written advice to the NBMG.
- Voting membership of the NBMG should be limited to parties who will be contributing to a cost-shared response. Jurisdictions who are not potentially affected by a pest or disease or who have indicated that they do not intend to contribute to a cost-shared response should be Non-voting members of the NBMG for decisions regarding that pest or disease incursion.
- All decisions of the NBMG should need to be made unanimously between voting members.
- Where attendance at NBMG meetings is delegated, the jurisdiction must enable that delegate to make decisions during the meeting.

4.5.2 Decision Making Role for Non-Government Stakeholders and Cost Sharing

The NEBRA Review Discussion Paper poses questions relating of how an increased role for non-government stakeholders could be accommodated into NEBRA decision making and whether private beneficiaries could be engaged in cost sharing.

Currently all NEBRA decision making is by government representatives on NBMGs, though private beneficiaries may take a decision making role on



NBMGs if they are contributing to the cost of a response ⁵² and affected stakeholders may participate as observers in NBMCC meetings ⁵³. Neither of these provisions has been exercised to date. Cost-sharing with private beneficiaries is contemplated in NEBRA but there are no private signatories to the agreement and, because of the complexity of identifying private beneficiaries for environmental biosecurity responses, leaves determining those beneficiaries to the NBMG on a case-by-case basis ⁵⁴.

While some jurisdictions have submitted to this review that they support the concept of requiring private beneficiaries to cost-share in NEBRA responses, a more workable mechanism for identifying these beneficiaries and assessing the appropriate level of contribution is not evident. Contributions from private beneficiaries are likely to remain on a case-by-case basis.

However, in their written submission, the New South Wales Government expressed openness to providing a decision making role to non-government stakeholders who provided in-kind support to a response. Other jurisdictions expressed varying levels of support for this idea in consultation. Providing a decision making role for in-kind contributors to responses could be a useful method of both encouraging much needed support for responses in the environmental space and also widen NEBRA decision making to parties outside of government who are invested in workable outcomes.

A number of non-government stakeholders including the National Landcare Network and Wildlife Health Australia submitted to this review that their networks could be mobilised to support biosecurity response activities. There are some examples of this already occurring with State Emergency Service units and Rural Bush Fire Brigades assisting in non-NEBRA biosecurity responses.

The NEBRA should be amended to allow any system participants to seek approval to join NBMG meetings as voting members if the system-participant has made (or will make) significant in-kind or financial contributions to a response in relation to an outbreak. Inclusion of system-participants as voting members should be at the discretion of the other NBMG members.

4.6 Technical Elements of the Agreement: Risk Assessment, National Significance, Technical Feasibility and Benefit-Cost

4.6.1 National Significance

At present the NEBRA contains criteria for the assessment of national significance in relation to the environment, people (including social amenity and human infrastructure) and business impacts (see section 2.4 for more detail).

⁵⁴ NEBRA, clause 7.9(b)

Recommendation 13

⁵² NEBRA, Schedule 7, clause 4.3(b)

⁵³ NEBRA, Schedule 8, clause 4.2(c)



Some submissions to this review, including that of the Wet Tropics Management Authority, the Invasive Species Council, and the Nature Conservation Society of South Australia supported the inclusion of more detail in sub-criteria for national significance or the inclusion of particular additional sub-criteria.

In contrast, other submissions, including the joint submission of Commonwealth DAWR and DOEE, questioned whether future criteria could be more flexible. The Commonwealth further submitted that the existing national significance criteria were derived from the DEE's Policy Statement 1.1 "Significant Impact Guidelines – Matters of National Environmental Significance – 2013" which were designed to guide development assessments rather than the impact of pests or diseases. New South Wales submitted that "what is needed is a clear pathway for environmental agencies to engage in biosecurity policy setting that identifies priorities, identifies the most efficient point to fund incursions or infestations and addresses the knowledge gaps that exist in current systems".

The primary deficiency in NEBRA's current national significance criteria is that they do not provide guidance in relation to prioritisation. If an outbreak meets the basic criteria then national significance will be established. It is also questionable whether the current national significance criteria reflect the highest priorities for environmental biosecurity responses given the criteria's origin.

Draft recommendation 14 of the IGAB Review is that "the NBC should lead five-yearly national-level risk prioritisation for emerging animal, plant and environmental risks and pathways, in partnership with system participants, reporting to AGSOC and AGMIN." ⁵⁵ A more meaningful assessment of national significance for proposed NEBRA responses would involve an evaluation of the pest or disease in line with this broader national-level risk prioritisation.

The NEBRA Review Discussion Paper also posed the question of whether it would be feasible to develop a list of Australia's priority environmental pests and diseases. Submissions to this review, including those of the Commonwealth, South Australian and Tasmanian governments tended to suggest that while developing such lists might be feasible they would be resource intensive to develop, that a number of other similar lists already exist, and that the use and function of such lists needs to be carefully considered. KPMG also notes that the draft IGAB review has stated that "the relevant NBC sectoral committee should identify all (exotic) pests and diseases of concern" and establish a priority list. ⁵⁶

If a priority list of pests and diseases is established under IGAB it could be used to help inform national significance assessments. However, KPMG notes the Australian Museum's submission to this review that it may be problematic to develop such lists because "so much of Australia's biodiversity remains undescribed". It may be more practical to develop risk prioritisation around consideration of pathways of incursion and groups of species that may be particularly threatening to Australian ecosystems.

Recommendation 14

National significance for proposed NEBRA responses should be assessed in line with a broader risk prioritisation framework (such as that recommended in the draft IGAB report) rather than static criteria for national significance.

4.6.2 Benefit-Cost Analysis

NEBRA responses must be cost-beneficial (see section 2.6 for more detail). During consultation many government stakeholders advised KPMG that development of benefit-cost analyses had been (or would be) the most problematic element of NEBRA documentation to complete because biosecurity agencies do not tend to have easy access to

⁵⁵ IGAB Independent Review Panel, Intergovernmental Agreement on Biosecurity Review Draft Report, December 2016, page 44

⁵⁶ IGAB Independent Review Panel, Intergovernmental Agreement on Biosecurity Review Draft Report, December 2016, page 41



economic expertise. Benefit-cost analysis is only once method of determining the economic benefits of undertaking a response. As responses are time-critical and information may be incomplete, it may be more appropriate to undertake a different measure of the economic benefits of responding.

In its submission to this review the Invasive Species Council stated "for pests or diseases with national environmental significance, remove the requirement for eradication to be cost-beneficial, in recognition that there is no satisfactory method for quantitatively assessing and comparing most environmental costs and benefits". The Invasive Species Council suggested that costs and benefits of a response be identified and that consideration of a response should proceed from an assumption that an environmental benefit-cost analysis will be positive.

Attachment 4A of the NEBRA does provide a framework for benefit-cost analysis, but while it acknowledges that "application of environmental valuation techniques" will be required to assess non-market impacts, it does not mandate any particular techniques. KPMG understands from consultation that environmental valuation techniques are resource intensive and often challenging to apply in practice.

In practice, the analysis of costs and benefits for NEBRA responses to date has been largely qualitative. In conducting background research KPMG reviewed the benefit-cost analyses contained in the approved response plans. In the response plans for the Yarwun and Brisbane Airport Red Imported Fire Ant responses the Queensland Government referenced work that had been completed by the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) in 2001 and 2014, the Queensland Department of Primary Industries and Fisheries in 2009. It should be noted that the quantified benefits of eradication in these studies relate to the avoidance of future control expenses, rather than assessing the preserved value of environmental assets.

The response plan for the Red Imported Fire Ant outbreak at Port Botany did not contain a separate benefit-cost analysis because the NBMG determined that the prior analyses completed for Yarwun and Brisbane Airport were sufficient. Benefit-cost analyses are not included in the response plans for Macao Paper Wasps (Cocos Keeling Island) or Browsing Ants (Darwin).

While it is positive that pre-existing benefit-cost information was available to support decision making for the Red Imported Fire Ant responses, it is clear that such detailed information will not always be available, particularly in relation to new and emerging threats. The lack of outbreak-specific benefit-cost analysis tends to suggest that the requirement to complete this work in an emergency situation is impractical.

Furthermore, KPMG finds the South Australian submission persuasive when it states that:

Generally, it would be a very rare occurrence where a proposed eradication response that is judged to be technically feasible to prevent a nationally significant impact would not have a favourable benefit:cost ratio. This is especially the case where only a tiny fraction of the potential distribution has been invaded to date.

Recommendation 15

Benefit-cost analysis requirements and guidance in NEBRA should be revised and simplified to accept qualitative descriptions of benefits where no pre-existing studies on the cost of an outbreak are available.

4.6.3 Technical Feasibility of Eradication

The NEBRA has been drafted to enable cost-sharing of efforts to eradicate an outbreak of a pest or disease. The agreement specifically excludes cost-sharing for containment activities not leading to eradication⁵⁷. Clause 4.2 of Schedule 4 outlines 17 criteria which must be addressed when

⁵⁷ NEBRA, clause 7.5(a)



assessing whether it is technically feasible to eradicate an outbreak of a pest or disease.

A number of concerns have been expressed in written submissions about the restriction of NEBRA responses to eradication activities:

- The South Australian Government submitted that it would be rare for total eradication of nationally significant marine pests and environmental diseases (such as myrtle rust) to be technically feasible but that there may be a high level of national benefit to containment.
- In their joint submission Commonwealth DAWR and DOEE submitted that there is "a potential gap in cases where eradication is not technically feasible, but emergency containment activities would be highly beneficial for multiple jurisdictions".
- Wildlife Health Australia submitted that there is a gap in NEBRA
 relating to its exclusive focus on eradication because eradication is
 unlikely to be achievable in relation to wildlife disease. They submitted
 that the requirement for a NEBRA response to be limited to
 eradication could prevent national action in relation to a disease
 affecting a nationally significant species.

KPMG notes that the difficulty of eradicating diseases in the aquatic environment has been acknowledged during the development of the response deed for diseases of aquaculture. Under the current draft of this deed it is proposed that responses would not need to demonstrate feasibility of eradication.

During consultation other stakeholders also advised that it is unlikely that feasibility of eradication could be demonstrated for environmental weeds given the length of time that seed banks remain viable.

However, other signatories, particularly New South Wales, have expressed concern about the expansion of NEBRA into cost-shared containment. New South Wales submitted that:

given the objective of the agreement is to provide freedom from pests or diseases of national significance eradication is the priority for effective risk management, not containment.

Any expansion of the scope of the NEBRA to address containment in limited circumstances would need to be a decision supported by all jurisdictions. KPMG understands that if the NEBRA were expanded to address containment (even in limited circumstances) some jurisdictions may be concerned about the potential increase to financial liability under the agreement. This could jeopardise the sustainability of NEBRA as a national agreement. In recognition of the importance of NEBRA as a national framework for environmental biosecurity responses, the agreement should not be expanded in scope if the outcome of that expansion would see some jurisdictions withdraw their support for this important agreement.

Recommendation 16

The National Biosecurity Committee should consider whether there is sufficient support to revise NEBRA to provide for cost-shared responses aimed at containment in some instances. These instances may include wildlife disease or environmental weeds where it be may be difficult to demonstrate feasibility of eradication but there are net benefits in a national, time-limited containment response. Alternatively, a different mechanism could be developed to facilitate cost sharing arrangements where eradication is not possible, but there are joint benefits to ensuring containment.



Appendix A: NEBRA Review Guiding Questions

Source: National Environmental Biosecurity Response Agreement (NEBRA) Five Year Review Discussion Paper

Purpose of the NEBRA

- 1) Do you think the responses conducted under the NEBRA accurately reflect its purpose and help to achieve its outcomes?
- 2) Do you think the agreement is a suitable mechanism to respond to environmental biosecurity threats in the future (i.e. 10-20 years from now)?
- 3) Do you think the definitions used in the NEBRA are clear and appropriate?

Roles and Responsibilities Under the NEBRA

- 4) Do you consider the roles and responsibilities outlined in the NEBRA to be clear and appropriate? If not, how do you think they could be improved?
- 5) Are these roles and responsibilities compatible with recent changes in Australian (Commonwealth, state and territory) biosecurity legislation?
- 6) How could an increased, but accountable, role for private beneficiaries and non-government stakeholders be incorporated into the NEBRA?

Decision Making and Governance

- 7) Do you think the NEBRA decision making framework is clear and appropriate? Are the outcomes of these processes reflective of the criteria on which they are based?
- 8) Do you think there should be an increased role for non-government stakeholders in the decision making process? If so, how do you think this might be achieved?

Delivery of Response Activities

- 9) Do you think the pre-response requirements of the NEBRA are clear and appropriate? Are they practical for smaller jurisdictions?
- 10) Could the guidelines and criteria for the technical requirements of initiating a response be made more clear and appropriate? If so, how?
- 11) How could private beneficiaries and non-government stakeholders be engaged more effectively in response activities?

Information Sharing

- 12) Do you think existing information sharing networks are utilized effectively for NEBRA-related matters? If not, how do you think this might be addressed?
- 13) What untapped sources of information may be useful in preparing for and responding to environmental biosecurity emergencies?

Preparedness

- 14) Do you think that the sharing of training and resources among jurisdictions and non-government stakeholders would help to increase preparedness for environmental biosecurity threats? If so, how might this be achieved?
- 15) What role could the non-government sector play in preparing for environmental biosecurity incidents? How could their involvement be facilitated?



Funding Arrangements

- 16) Do you think it is feasible to develop a list of Australia's priority environmental pests and diseases? If so, how might this be achieved?
- 17) Do you think current cost sharing arrangements under the NEBRA are appropriate and equitable?
- 18) How might private beneficiaries be engaged in cost sharing arrangements?

Managing the NEBRA

- 19) How important is it that the NEBRA is consistent with other biosecurity response deeds and agreements? Are there any particular inconsistencies that should be addressed? For example, do you think that transition to management provisions should be incorporated into the NEBRA?
- 20) Do you think the requirement for an ongoing NEBRA administrative group is practical?
- 21) How efficient and appropriate are the NEBRA custodian processes? How might they be improved?



Appendix B: Face-to-face Consultation Sessions - Dates and Organisations Represented

Date	Location	Organisations Represented
18 January 2017	Hobart	Tasmanian Government Department of Primary Industries, Parks, Water and Environment
18 January 2017	Hobart	Tasmanian Conservation Trust
19 January 2017	Melbourne	Victorian Government Department of Economic Development, Jobs, Transport and Resources Victorian Government Department of Environment, Land, Water and Planning
20 January 2017	Melbourne	Australian Prawn Farmers' Association Peal Producers Australia
24 January 2017	Sydney	New South Wales Government, Department of Primary Industries New South Wales Government Office of Environment and Heritage New South Wales Government Environment Protection Authority New South Wales Government Local Land Services New South Wales Government National Parks and Wildlife Service New South Wales Government Department of Premier and Cabinet New South Wales Government Department of Health



Date	Location	Organisations Represented
		New South Wales Government Transport for New South Wales
		New South Wales Government Office of Emergency Management
		New South Wales Health
		New South Wales Government Rural Fire Service
		New South Wales Public Works
		New South Wales Police
		New South Wales State Emergency Services
		Local Government New South Wales
24 January 2017	Sydney	Wildlife Health Australia
		Ports Australia
		OceanWatch Australia
		Environmental Defenders Office New South Wales
		New South Wales Natural Resources Commission
		University of New England
		Invasive Species Council
27 January 2017	Teleconference	Victorian Government Department of Environment, Land, Water and Planning
30 January 2017	Perth	Western Australia Government Department of Agriculture and Food
		Western Australia Government Department of Parks and Wildlife
		Western Australia Government Department of Fisheries
		Western Australia Government Department of Water
		Western Australia Government Forrest Products Commission



Date	Location	Organisations Represented
		Pilbara Ports Authority
		Biosecurity Council of Western Australia
30 January 2017	Perth	Wheatbelt NRM
		Western Australian Farmers Federation
		RSPCA Western Australia
		Forrest Industries Federation WA
		Warren Catchments Council
		Pastoralists and Graziers Association of WA
		Rangelands NRM
		WA Local Government Association
		Biosecurity Council of WA
		Aquaculture Council of WA
		Peel Harvey Catchment Management Authority
31 January 2017	Adelaide	South Australian Government Department of Primary Industries and Regions
		South Australian Government Research and Development Institute
		South Australian Government Department of Environment, Water and Natural Resources
		South Australia Health
1 February 2017	Adelaide	Zoos SA
		Landcare Association of South Australia
		Nature Conservation Society of South Australia



Date	Location	Organisations Represented
3 February 2017	Teleconference	Parks Victoria
6 February 2017	Darwin	Northern Territory Government Department of Environment and Natural Resources Northern Territory Government Department of Primary Industries and Resources
7 February 2017	Darwin	Northern Territory Government Department of Environment and Natural Resources Northern Land Council Northern Territory Cattleman's Association Northern Territory Seafood Council Centrefarm
8 February 2017	Brisbane	Queensland Government Biosecurity Queensland Queensland Government Department of Environment and Heritage Protection Queensland Government Department of Natural Resources and Mines Queensland Government Department of Agriculture and Fisheries Queensland Government Department of National Parks, Sport and Racing
9 February 2017	Brisbane	Condamine Alliance
13 February 2017	Canberra	Australian Government Department of Agriculture and Water Resources Australian Government Department of Environment and Energy Australian Government Office of the Chief Veterinary Officer Australian Government Office of the Chief Plant Protection Officer Australian Bureau of Agricultural and Resource Economics and Sciences



Date	Location	Organisations Represented
13 February 2017	Canberra	Plant Biosecurity CRC CSIRO Invasive Animals CRC Australian Museum
14 February 2017	Canberra	Australian Capital Territory Government Directorate of Environment, Planning and Sustainable Development
14 February 2017	Canberra	NRM Regions Australia National Farmers' Federation



Appendix C: List of Other Organisations Invited to Participate in Consultation Sessions

Jurisdiction	Organisations Invited
ACT	Australian Environment Foundation
ACT	Australian Network for Plant Conservation
ACT	Conservation Council ACT
ACT	Environmental Defenders Office ACT
ACT	Indigenous Land Corporation
ACT	National Parks Association of the ACT
ACT	NRM Regions Australia
Cwth	Austrade
Cwth	Australian Landcare Council
Cwth	Australian Marine Alliance
Cwth	Australian Recreational Fishing Foundation (ARFF)



Jurisdiction	Organisations Invited	
Cwth	Australian Veterinary Association	
Cwth	Centre for Australian National Biodiversity Research	
Cwth	Centre for Invasive Species Solutions	
Cwth	Director of National Parks	
Cwth	Island Conservation	
Cwth	Wildlife Disease Association Australasian Section	
NSW	Australasian Bat Society Inc	
NSW	Australian Association of Bush Regenerators	
NSW	Australian Farm Institute	
NSW	Australian Native Plants Society	
NSW	Centre for AgLaw, University of New England	
NSW	Council of Australasian Weeds Societies	
NSW	Environmental Defenders Office NSW	
NSW	Foundation for National Parks and Wildlife	
NSW	Greenpeace Australia Pacific	
NSW	Keep Australia Beautiful	



Jurisdiction	Organisations Invited	
NSW	Landcare Australia Limited	
NSW	National Parks Association of NSW	
NSW	Nature Conservation Council of NSW	
NSW	NSW Natural Resources Commission	
NSW	Nursery and Garden Industry Australia	
NSW	OceanWatch Australia	
NSW	Pet Industry Association of Australia	
NSW	Shipping Australia Limited	
NSW	The Australian Plants Society	
NSW	Tourism Australia	
NSW	Western Local Land Services	
NSW	World Animal Protection (formerly World Society for the Protection of Animals Australia)	
NSW	World Wide Fund for Nature - Australia	
NSW	World Wildlife Fund (WWF)	
NSW	Zoo and Aquarium Association	
NSW	Zoo and Aquarium Association	



Jurisdiction	Organisations Invited
NT	Amateur Fishing Association of NT
NT	Central Land Council
NT	Department of Infrastructure, Planning and Logistics
NT	Environment Centre NT
NT	Environmental Defenders Office NT
NT	Northern Territory Farmer's Association
NT	Northern Territory Field Naturalists' Club
NT	Northern Territory Seafood Council
NT	Parks and Wildlife Commission of the Northern Territory
QLD	Australasian Wildlife Management Society
QLD	Australian Environmental Pest Managers Association
QLD	Australian Marine Conservation Society
QLD	Environmental Defenders Office QLD
QLD	National Parks Association of Queensland
QLD	Queensland Conservation Council
QLD	Rainforest Rescue



Jurisdiction	Organisations Invited
QLD	Southern Cross Cargo Pty Ltd
QLD	Torres Strait Regional Authority
QLD	Wet Tropics Management Authority
SA	Birds SA
SA	Conservation Council of SA
SA	Environmental Defenders Office SA
SA	Field Naturalists Society of SA
SA	Foundation for Australia's Most Endangered Species
SA	Landcare Association of SA
SA	National Trust South Australia
SA	Natural History Society of South Australia
SA	Nature Conservation Society of SA
SA	Nature Foundation SA
SA	Trees for Life
SA	Weed Management Society of SA
TAS	Birdlife Tasmania



Jurisdiction	Organisations Invited
TAS	Cradle Coast NRM
TAS	Environment Tasmania
TAS	Environmental Defenders Office TAS
TAS	North East Tasmania Land Trust Inc
TAS	NRM North
TAS	NRM South
TAS	Tasmanian Farmers and Graziers Association
TAS	Tasmanian Land Conservancy
TAS	Tasmanian National Parks Association
TAS	Tasmanian Salmonid Growers Association
TAS	The Wilderness Society
VIC	Animals Australia
VIC	Australian Conservation Foundation
VIC	Banksia Environmental Foundation
VIC	Birdlife Australia
VIC	Bush Heritage Australia



Jurisdiction	Organisations Invited
VIC	Conservation Volunteers Australia
VIC	Earthwatch Institute
VIC	Environmental Justice Australia
VIC	Friends of the Earth Australia
VIC	Greening Australia
VIC	Indigenous Flora and Fauna Association
VIC	Maritime Industry Australia Ltd
VIC	Nature Conservancy Australia
VIC	Sustainable Agriculture Initiative Platform Australia
VIC	Trust for Nature
VIC	Victorian National Parks Association
VIC	Wild Matters Pty Ltd
WA	APPEA
WA	Australian Wildlife Conservancy
WA	BHP
WA	Botanical Gardens and Parks Authority



Jurisdiction	Organisations Invited
WA	Chevron
WA	Conservation Council of WA
WA	CPSM Murdoch University
WA	Department of Parks and Wildlife
WA	Department of Water
WA	Dieback Working Group
WA	Environmental Defenders Office WA
WA	Environmental Weeds Action Network (may not be active?)
WA	Industry Plantation Management Group
WA	Marine Parks and Reserves Authority
WA	National Aquaculture Council
WA	Northern Agricultural Catchment Council (NACC)
WA	NRM WA (Primary contact to 7 regional groups)
WA	Nursery and Garden Industry Australia
WA	Perth Cichlid Society
WA	Perth Region NRM



Jurisdiction	Organisations Invited
WA	Perth Zoo
WA	PGA
WA	Ports WA Environmental Working Group
WA	Recfishwest
WA	Rio Tinto
WA	Shell Development (Australia) Pty Ltd
WA	South Coast NRM
WA	South West Catchment Council
WA	Southern Ports Authority
WA	Swan River Trust (DPAW)
WA	Terrestrial Ecosystems
WA	WA Farmers
WA	WAFIC
WA	WALGA
WA	Water Corporation
WA	Woodside



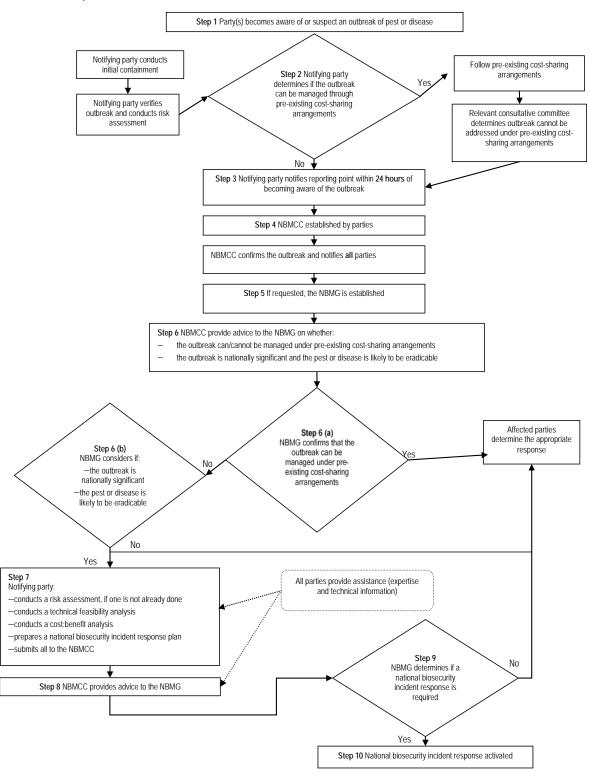
Appendix D: Written Submissions to the Review

Government Submissions	Submissions from Non-Government Organisations
Biosecurity Council of Western Australia	Australian Museum
Commonwealth Department of Agriculture and Water Resources and	Council of Australasian Weed Societies
Department of the Environment and Energy (joint)	Friends of Belair National Park
New South Wales Government	Invasive Species Council
Northern Territory Government	National Farmers Federation
Queensland Government	National Landcare Network
South Australian Government	Nature Conservation Society of South Australia
Tasmanian Government	Pastoralists and Graziers Association of Western Australia
Western Australian Government	Ports Australia
Wet Tropics Management Authority (Commonwealth Government)	Western Australian Farmers Federation
	Wildlife Health Australia



Appendix E: Decision Flow Chart

Source: NEBRA, Schedule 1





Appendix F: Minor Technical and Definitional Amendments

This appendix details recommendations for minor technical and definitional amendments that have been identified over the course of this review.

F.1 Definitions

- 1) The definition of 'primary production' may need to be amended to include the production of fungi as well as animals and plants.
- 2) In some cases it may be appropriate for smaller jurisdictions to 'outsource' the completion of risk analyses, benefit-cost analyses, etc to a larger jurisdiction. Clause 3 of schedule 5 (Eligible Costs) could be expanded to include provision for cost sharing expenses where one jurisdiction has paid another jurisdiction to prepare assessments to be provided to NBMCC and NBMG.
- 3) The definition of 'outbreak' in the NEBRA is somewhat circular: it describes an "outbreak' as 'a recently detected outbreak of...'
 Furthermore, KPMG interprets the definition of outbreak (and the related clause 6.5) as potentially including the range expansion of a pest or disease in some circumstances. The definition (and related

May 2017 clause 6.5) should be redrafted to address this circularity and make clearly whether range expansion is covered by NEBRA.



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