Australian Academy of Technological Sciences and Engineering Western Australia Division



Conference Communique

Bio Security - A Future Imperative

Towards effective science, statute and community based strategies

Statement of recommendations from:

an independent forum of community and industry leaders, policy makers, scientists and resource managers convened with the goal of contributing strategies towards a biologically secure future for Australia's industry and environment.

> October 19, 2001 Curtin University W.A.

Seminar Sponsors:





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Foreword

This independent seminar, hosted by the WA Division of the Australian Academy of Technological Sciences and Engineering, was created as forum for community and industry leaders, policy makers, scientists and resource managers with a stake in attaining a biologically secure future for our industry and environment.

Almost every sector of community life is affected by biosecurity issues including: environment; tourism; urban systems and habitat; fisheries; agriculture; forestry; river management; and local government.

Across the entire national community a diverse range of people simultaneously:

- contribute to the problems threatening biosecurity
- are affected by the impacts of the problems
- can create opportunities, or act, to manage the problems better.

The primary goal of the seminar was to make a useful, strategic, contribution in response to issues of biosecurity in Australia.

This was a contribution aimed beyond most previous debate. It addressed the issue in terms of the wide spectrum of economic, social and environmental impacts and actions. The forum engaged 76 participants invited from a broad cross-section of public and private interests.

After seminar sessions for papers and discussion, the forum convened in a plenary session to develop the basis of a statement proposing a positive way forward in future development of biosecurity. This plenary outcome was then passed to the rapporteur and editorial committee for refinement of its expression. The resulting statement is presented hereunder. Seminar proceedings are posted on the Academy website.

The subject and outcome of this forum are of national significance. The Academy has undertaken to make this communique nationally available and give opportunity for its recommendations to be carried forward into further positive discussions.

> Peter Knight FTSE Chair, WA Division

Brian Sadler FTSE Convener

Conference Statement

Rapporteur

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Biosecurity - A Future Imperative

Towards Effective Science, Statute and Community Based Strategies

The Australian Academy of Technological Sciences and Engineering held a seminar and forum on biosecurity on October 10, 2001 at Curtin University, Perth, Western Australia. The purpose of the forum was to contribute to development of a strategic response to biosecurity issues in Australia.

The aim was to go beyond previous debate and to address the subject in terms of the full spectrum of economic, environmental and social issues.

This communiqué is an outcome of the forum. Its intention is to stimulate action by Government, industry and ultimately the community to address major biosecurity issues facing Australia. The communiqué is framed as a set of recommendations to those who act on behalf of the community on biosecurity matters.

By design, this forum did not consider human health aspects of biosecurity in detail. However the forum recognised that there were issues, approaches and technologies that would benefit from joint consideration by the sectors encompassed by this forum and the health sector.

Recommendation 1

That Biosecurity become the business and responsibility of all Australians and that the concept of biosecurity replaces the more restrictive language of quarantine.

Biosecurity is now an issue of broad national concern. Traditionally, biosecurity has been mostly the business of agriculture and allied industries often under the more restrictive title of quarantine. There is a need now to broaden the debate to include other major sectors of the economy and to engage the whole community. Biosecurity has major economic and social implications for the following sectors:

- Environment and biodiversity terrestrial and marine
- Agriculture animals and plants
- Forestry native forests and plantations
- Fisheries marine, freshwater and aquaculture
- Tourism tourists and the environment
- Water supplies
- Amenity and recreation.

The human health sector in a human disease sense is specifically excluded, although bioinvasion problems in the above sectors can and do impact on human health. However

there are generic issues which cross the sectors mentioned above and the human health sector.

The term biosecurity better describes the issues than the more limited and outdated term quarantine, has more appeal to the general community, and should become the term of preference for government, industry, the community and the media.

Recommendation 2

That, while the impact of biosecurity breaches is felt mostly at a sectoral level and often the response occurs at that level, there is a need to recognise issues which are generic to all sectors and which would benefit from common understanding and approaches.

Rather than different sectors or sub sectors acting in isolation with respect to the biosecurity issues facing them, there are advantages in sharing approaches, methodologies and experience. These common threads need to be captured wherever possible through regular meetings of principal players in a setting where the ideas can be captured and distilled. A Triennial National Biosecurity Conference, perhaps with prior State/Territory conferences on biosecurity is suggested as a suitable way forward. Establishment of broadly-based emergency response arrangements to deal with serious biosecurity breaches will be required, supplemented by training in generic skills where appropriate, for example by Emergency Management Australia.

There is a need to look for commonality of issues, approaches, technologies and responses with respect to biosecurity across all sectors in Australian society, including the sectors mentioned above and the health sector.

Recommendation 3

That there is an urgent need for a national audit of Australian capability in terms of facilities, skills and response mechanisms with respect to ongoing high risk and emergency biosecurity issues.

National reviews of quarantine/biosecurity in the recent past have called for an audit of skills, facilities and response mechanisms across sectors. In view of the heightened awareness of biosecurity issues in the Australian context and the ever-increasing volume of tourism and trade this has become an urgent national priority. It is recommended that this be carried out as a joint Federal/State initiative. While it would be highly desirable to have input of funds by industry sectors to help pay for review, the immaturity of the funding debate may unreasonably delay implementation of the review. It is too important an issue to wait and government should take the initiative. Again there is a need to capture and share approaches across all sectors.

Recommendation 4

That there is a need to better understand biosecurity issues in terms of risk assessment and management and that a Centre of Excellence in Biosecurity Risk Management be established.

Ultimately, biosecurity comes down to risk assessment and risk management in an uncertain world. While there are some excellent examples of risk assessment at a sector or sub sector level, there is by no means a common understanding of risk in relation to biosecurity nor is there a common language across sectors. There are widely different

positions held by different sectors. For example the agricultural sector has had to learn to live with risk of invasion and 'cut its cloth' according to the perceived impact of the invader. The biodiversity sector on the other hand comes from a starting position of 'not one species to be lost with eternity as the time scale'.

The time has come where a Centre with capacity to provide analysis of approaches, methods and knowledge should be developed. Formats for such a centre include a University/CSIRO Centre of Excellence in Biosecurity Risk Management or a Cooperative Research Centre in Biosecurity and Risk Management.

Recommendation 5

That there is a need to engage Government, industry sectors and the wider community concerning the need to move beyond pre-occupation with barrier quarantine (checkpoints) towards more appropriate emphasis on other prevention measures, preparedness, surveillance and rapid response.

The community generally experiences biosecurity measures by passage through a quarantine checkpoint at an airport or state border. There is a need to mount an enhanced public education program which brings to the attention of the public their role and responsibilities in looking after biosecurity before and after the checkpoint, through preparedness, surveillance and hygiene. Biosecurity measures need to be implemented at national, State/Territory, regional and property/patch levels.

Recommendation 6

That there is a need for an effective national community awareness, information and education program on biosecurity and what it means to every individual in society.

There is a need to provide general community education about biosecurity and what it means to everyone in terms of the impact on them, their families, their businesses and their environment. Case studies that define the benefits and costs at an individual family or enterprise level may be one path to gaining the attention of the community. It is acknowledged that this is a big challenge given the competing demands for consumer attention, but effort must be made.

A meeting between key people with biosecurity and community awareness expertise to discuss this issue may be the way forward. Maintaining momentum will be a significant issue, which must be addressed. The returns to the community will be very high.

Recommendation 7

That there is a need to streamline institutional arrangements at a State, Federal and where possible a global level to allow timely and effective management of biosecurity to ensure a truly national approach.

Australia is disadvantaged to a degree by its Federal/State arrangements when considering biosecurity. Australia often looks enviously at countries such as New Zealand, which are the able to act more decisively than Australia on these kinds of issues. Nonetheless Australia does cope, but constant vigilance is needed to ensure transaction costs and response times are kept to a minimum. COAG needs to continue to monitor institutional arrangements to ensure they are as efficient as possible.

Increasingly, international cooperation will be required to identify serious biosecurity threats, and cooperatively develop and implement biosecurity risk mitigation strategies.

Recommendation 8

That the positive aspects of biosecurity action be stressed and conveyed to industry and the community in context of the economic, environmental and social benefits of effective biosecurity.

Biosecurity is often seen in a negative way, as media coverage is usually tied to a dramatic harmful event or passengers are inconvenienced at checkpoints. Yet biosecurity is also concerned with market access and market premiums, protecting the environment, protecting health and providing a safe, enjoyable life for the whole community. 'Good news' stories on biosecurity need to be promoted.

Recommendation 9

That special effort is made to inform the community on the impacts of bioinvasion of foreign organisms on the environment, amenity and recreation.

The Australian environment is a special case which requires special attention, and the public is becoming ever more attuned to environmental issues. Environmental issues are commonly on the centre stage of political debate – salinity, water supplies, greenhouse and logging of old growth forests are recent examples.

The impact of bioinvasion on the environment has been greatly undersold. There are many stories to be told which will catch the public imagination. A concerted campaign to tell them is required.

Recommendation 10

That funding models to support biosecurity activities be explored in detail by government and industry and that a special meeting be convened for this purpose.

The complex issue of 'who pays' for biosecurity is subject to ongoing, sometimes heated, but often shallow, debate. While there are no simple, quick answers on this issue there is a body of knowledge on funding philosophy and mechanisms which needs to be shared across sectors. Aspects of the debate include public and private good, state/federal relationships, identifying the beneficiaries, collection mechanisms, hypothecation of funds and free riders. Some sectors or sub sectors are much further down the path of understanding the issues than others and a forum where sharing knowledge across sectors can occur is overdue.

Conference Outline

Welcome:

Professor Lance Twomey AM - Vice Chancellor, Curtin University of Technology and Peter Knight FTSE - Chairman WA Division ATSE and Conference Chair

(peter.knight@clough.com.au)

Opening Address:

Importance of Bio Security for WA's Primary Industries, Environment and Health Fran Logan MLA

on behalf of The Hon. Kim M Chance MLC - Minister for Agriculture; Forestry and Fisheries; The Midwest, Wheatbelt and Great Southern and The Hon Dr. Judy Edwards MB BS MLA - Minister for the Environment and Heritage

Session 1 - Bio Security and our Future - Laying out the Issues

An Overview of Australia's Biosecurity Record and Future Operating Environment

Malcolm Naim FTSE, Vice Chancellor Murdoch University, Chairman Quarantine & Export Advisory Council (mal.naim@aqis.gov.au)

Impact of Global Trade on Bio Security and Vice Versa - The opportunities and rules of globalism and federalism

Dr. Brian Stynes, General Manager Plant Biosecurity, AFFA

(brian.stynes@dpie.gov.au)

Session 2 - Needs, Tensions and Opportunities

Managing Environmental Risk and Bio-Security in an Open Society

Prof. Tom Beer, Coordinator CSIRO Risk Assessment Network Dr. Geoff Syme, Director Aust. Research Centre for Water in Society (tom.beer@dar.csiro.au) (sym034@mailhost.per.its.csiro.au)

The Bonus of Border Control

Laurie O'Meara, Chairman Tourism Council of WA Stephen Albin, Deputy Executive Director, Tourism Task Force (omeara@emeraldhotel.com.au) (salbin@ttf.org.au)

Conservation and Bio Security - Key Nature Conservation Issues

Gordon Wyre A/Director, Nature Conservation Dept Conservation & Land Management WA (gordonw@calm.wa.gov.au)

How does WA's Agriculture trade and yet maintain Bio Security? Allen Clarke, Farmer Brookton

Session 3 - Paths to our Future

Biosecurity for Australia requires collective action from all stakeholders. - If not you: then who?

Rob Delane Executive Director Agricultural Protection Department of Agriculture WA

(rdelane@agric.wa.gov.au)

Something Fishy - Take pilchards and salmon, striped zebra mussels and European carp, mix with ballast water, aquaculture and aquariums - Some practical recipes

Dr. Brian Jones Senior Fish Pathologist, Dept of Fisheries WA Richard Stevens Manager R&D WA Fishing Ind. Council (bjones@agric.wa.gov.au) (r&d@wafic.org.au)

Australia is the size of Europe – let's talk the pros and cons of zoning

Dr Richard Norris Manager Animal Health and Surveillance, Department of Agriculture WA (rnorris@agric.wa.gov.au)

Session 4 - Plenary Discussions

 Facilitator:
 Barry Carbon FTSE, Consultant

 Rapporteur:
 Michael Poole FTSE Head, Centre for Mediterranean Ag. Res., CSIRO

(bcarbon@iinet.net.au) (m.poole@ccmar.csiro.au)

Seminar Convener:Brian Sadler FTSE (brian.sadler@bigpond.com)