

## **Introduction**

The Department of Primary Industry, Fisheries and Mines (DPIFM) has maintained a strong stance in security of the northern quarantine barrier. Successive Territory governments have had a strong awareness of the quarantine risks posed by the regions to our north to our primary industries, the unique environment and the community.

The importance of a partnership arrangement with Commonwealth quarantine authorities to maintain the quarantine barrier is a high priority. DPIFM is also a strong supporter of the Emergency Animal and Plant Response Agreements, the government agreement relating to Marine Pests response and the soon to be signed AusBIOSEC arrangements.

This submission is loosely structured around the questions raised in the Issues Paper circulated to assist contributors to the Review.

This submission seeks to emphasise the following points:

- That the increasing numbers of reported post barrier detections increases the risk of an exotic pest or disease becoming established in Australia. Urgent remedial action is needed to address such failures at the quarantine barrier.
- That there be a greater transparency in the development of quarantine, export and Biosecurity policies and increased communication between the Commonwealth and States and Territories.
- That the surveying and extension function of the Northern Australia Quarantine Strategy in the Northern Territory be maintained at current levels and not be subject to funding reduction.
- That practical policies and procedures be implemented to meet the risks posed by biofouling on ship hulls and organisms in ballast water.

### **1. The Quarantine and Biosecurity Continuum (Section B2)**

DPIFM supports the broad definition of the continuum rather than a more focussed definition that places emphasis on border activities.

It is important to note that for the continuum to operate effectively the Commonwealth must show increased intent to work as partner with States and Territories. Diminishing resources demand this happens so that issues such as post barrier detections targeted post barrier surveillance and monitoring programs shared responsibilities with industry and community stakeholders exotic pest response funding and extension services, can be addressed.

## **2. Shared responsibilities (Section B2)**

Despite of many messages given by the Commonwealth that Australia operates under an appropriate level of protection (a stance supported by peak industry bodies), when an exotic incursion occurs, many in the community and within industry sectors disagree with the official line and demand that exotic pests and diseases are kept out of Australia at all costs. This highlights either a communication issue or a case of industry playing politics. Whatever the cause, it does however send a message to the community that there is not a partnership between industry and the Commonwealth.

DPIFM supports quarantine measures that meet the appropriate level of protection and determined by the best technical information available. The measures must be transparent, meet the international commitments of the WTO and be developed in partnership with State and Territory Governments, industry and community stakeholders.

Although there are many aspects of Quarantine and Biosecurity that can be considered to be 'in the public good' there are many instances where a direct beneficiary can be identified in the quarantine or export process. Where this occurs, the cost of the quarantine or export procedures should be met by the beneficiary who also should participate in project management and policy development.

A major component of the Quarantine and Biosecurity continuum is the role the Commonwealth and States and Territories play in exotic pest and disease monitoring and surveillance programs.

In the north there is a mixture of Commonwealth/NT programs but also others carried out by NAQS which, due to poor communication are largely unknown within this Department. Not only do these programs provide an early warning of exotic pest and diseases but they also underpin Territory exports of livestock, live plants and plant related products in providing area or property freedom for pests and diseases.

DPIFM is aware that funding for NAQS operations is not permanent but provided on a recurrent basis. Our belief is that this is a major flaw in the strategic implementation of NAQS programs and does not provide confidence in the long term future of NAQS.

DPIFM's view is that NAQS must receive guaranteed long term funding from the Commonwealth, be more open in communicating its programs and results to DPIFM, and plan joint programs that will enhance the Biosecurity preparedness of the Northern Territory.

## **3. Changing Operating Environment (Section B3)**

The Review Issues Paper lists various developments that have added to the complexity of managing risks.

DPIFM is in general agreement with the matters raised in the paper.

On an operational aspect it must be pointed out that the issue of post barrier detections causes us concern on two fronts:

Firstly the clearance system currently in use relies heavily on trusting import documentation and the skill of the inspector participating in the process. Secondly the expertise of the inspecting officer is important so that shipments can be cleared with confidence.

It is our view that the current processes and lack of trained staff cannot meet the current challenges.

The number of post barrier detections, the lack of consignments inspected and the inability of AQIS to track shipments from the port of entry to the points of sale do not give confidence in the current system.

#### **4. Risk across the Quarantine and Biosecurity Continuum (Section C1)**

##### **a. Field of expertise of AQIS officers in aquarium fish imports**

The current AQIS policy of rotating staff to different positions every few years does not allow staff to become experts in a field and receive appropriate training. For example, it is very difficult determine whether individual fish in a consignment of imported aquarium fish are allowed species, especially if they are juvenile. It requires specific training to be able to identify individual species and also to determine whether they are disease-free.

Anecdotal reports indicate that many aquarium fish importers are aware of the inability of AQIS staff to accurately identify fish species and exploit this situation to import illegal fish amongst allowable species. As a consequence, species are subsequently illegally traded as a result of such importations.

##### **b. Assessment process for allowable species and enforcement**

Species need to be more rapidly assessed for inclusion on the allowable import list. At present, government processes lag behind economic demands. For example, new ornamental fish are imported and traded illegally before assessment processes are undertaken.

Currently the quarantine systems are not appropriate to maintain the Acceptable Level of Protection (ALOP). Specifically there is severe lack of enforcement of the aquatic species on the Commonwealth import list. The black market sale of illegally imported aquatic species was not identified in the Issues Paper.

Assessment of species should not only be initiated through the application process. There needs to be a mechanism whereby species determined as likely to be traded (eg. by the aquarium industry) are assessed.

##### **c. Post-entry powers**

Consideration should be given to 'after the event' issues. AQIS should have powers to fine or prosecute those in possession of illegally imported species. Without such powers to enforce AQIS legislation, the import permit process will continue to be disregarded and subsequent biosecurity risks will go unmanaged.

For example, a new breed of aquarium fish that was discovered overseas is now appearing in the aquarium shops in Australia although the species has not yet been assessed for import and therefore no import permits could have been issued.

#### **d. Import Risk Assessment Process**

The existing Import Risk Assessment (IRA) process is time consuming and the speed and urgency with which assessments are undertaken should be reviewed.

Many species have been under assessment for several years without a determination reached regarding the status of the species. These delays often fuel the black market trade of such species, and fail to prevent the importation of species posing a disease risk.

The process also fails to prevent importation of species posing a disease risk.

It could also be improved by the inclusion of a feedback loop to facilitate frequent and rapid review or modification of individual IRA's.

#### **e. Accountability**

When border control measures fail, or in instances where a breach of protocol results in the incursion/establishment of a pest AQIS takes no responsibility, and is no longer interested in the matter.

Measures should be in place to review such situations, determine what went wrong and immediately modify protocols as necessary.

#### **f. Marine Industry/Environment**

AQIS/Biosecurity Australia measures need to adequately recognise or protect the environment (aquatic and terrestrial), aquatic resources, and industries reliant on these resources. There is still a traditional/historical focus on terrestrial primary industry resources/exports.

#### **g. Other**

The need for a targeted communication campaign for the aquarium hobbyist has been identified and is currently being investigated as part of the national strategic approach to the management of ornamental fish. Hobbyists have been identified as often being heavily involved in the black marketing of aquatic species not allowed into Australia.

It is understood that a Performance Audit on quarantine effectiveness was conducted in 2005-06. Reviews are an appropriate measure to ensure effectiveness. However, the results of the audit have not been communicated to stakeholders, nor advice given regarding the resulting actions undertaken as a result of the review. The effectiveness of a review is only achieved if improvement measures are undertaken and communicated.

In addition to the above, currently there is a dispute between AQIS and the States/Territories as to whether AQIS should accept any responsibility for post-entry

surveillance on imported materials once they have cleared the barrier. DPIFM's view on this issue has been stated earlier in this submission.

The current stance of AQIS on the matter of post barrier surveillance makes a nonsense of the work currently carried out by NAQS on Northern Australian mainland and the Torres Strait. There are numerous surveillance and monitoring programs targetting the spread of exotic pest and diseases present in the countries to our north.

DPIFM's view is that in some sections of DAFF the routine sharing of plant and animal pest and disease information is very good. Unfortunately the NAQS operation seem to be working in an information vacuum at a local and national level. Consequently it is very difficult to obtain information that could be crucial to biosecurity planning for the Northern Territory.

DPIFM believes that the current emergency response plans for exotic pest and disease outbreaks in the animal, fish and plant industries are adequate, although more sectors in the plant industry must be encouraged to join the cost sharing Deed..

It is hoped that AusBIOSEC will cover the current gaps in response and cost sharing in the environment, and social amenty areas.

DPIFM is in a unique position because a veterinary position is partially funded by AQIS to perform international livestock export inspection and certification functions on behalf of the Commonwealth. We are therefore in a position to critique the export process and consider that it works well in the Northern Territory.

## **5. Legislative Framework (Section C2)**

An effective partnership between the Commonwealth and States and Territories enabling quarantine and export continuum programs, must be underpinned by effective legislation. This legislation must be up to date and complementary.

DPIFM's view is that it is not the current situation and must be subject to an extensive review. It is pointless for States and Territories to take the lead role in exotic pest and disease eradication when their legislation is not adequate. In addition if legislation cannot support Federal quarantine policies then urgent remedial action must occur. It is recommended that an urgent meeting be held to identify and establish a remedial plan to identify legislative inconsistencies and a plan to put in place a national consistent legislative process of change.

DPIFM is fortunate in that both its Plant and Livestock Bills will go before the Legislative Assembly in the next few months. If passed, this legislation will meet the legislative challenges for managing an exotic response and subsequent owner reimbursement payments.

### **Issue Paper Questions - Responses**

- Are Australia's legislative arrangements designed to manage relevant environmental and marine threats effectively?**

The legislative arrangements are lacking in some areas (particularly with respect to biofouling mediated pests) with respect to 'blocking' of threats at the border, and are generally insufficient when it comes to processes for 'cleaning up' the pests/ diseases that breach border controls.

Legislative arrangements are focussed on protecting the agricultural industry and export markets with less consideration given to marine industries and the environment (both aquatic and terrestrial).

- **Should an import permit be used to restrict a product from a particular region in Australia if it is determined on a scientific basis to be regionally free of a pest or disease, while still allowing general access to the Australian market?**

There is still insufficient understanding of the biology of many pests and diseases to be able to say, with certainty, that a disease will be a threat in one jurisdiction and not in another. There is still relatively unregulated transfer of animals/ products between states. Aquarium fish and fish bait for example can be moved from state to state with little to no control or testing on their health status. Therefore a national exclusion approach is supported.

- **Is there sufficient priority given to monitoring and surveillance post-border? Who should provide these functions and resources?**

No. At present the Commonwealth relies on the States to undertake the monitoring and surveillance and the level to which this is undertaken varies considerably from state to state. Most of the monitoring that is undertaken is 'passive' relying on the disease to appear before action is taken. In some situations this may be appropriate but for many serious pests and diseases it is not an adequate approach. Passive surveillance should be considered to be well below world's best standards for monitoring and surveillance, yet Australia reports to International bodies that the monitoring and surveillance is being undertaken.

This is a national problem and needs a national approach. The Commonwealth should take a lead role in coordinating and funding post border monitoring and surveillance with contributions from each State/Territory and industry. Industry contributions should be commensurate with risk and ability to pay and not be an unnecessary burden.

- **Does cost-recovery have an impact on the ability of AQIS staff to deliver public good outcomes?**

Yes. It diminishes the level of service that can be offered and can lead to people circumventing (or trying to circumvent) the system so they don't have to pay.

In instances where it cannot be determined whom to recover costs (eg. biosecurity threats associated with apprehended foreign fishing vessels), the ability and willingness to respond to the threat is compromised.

- **Are existing monitoring and review mechanisms for quarantine and biosecurity policy and operations appropriate and effective? If not, what options should be considered, and why?**

No. Most of the biosecurity policies and operations rely on Import Risk Assessments which are outdated. There needs to be a more rigorous approach to re-evaluating and updating IRA's to try and keep pace with advances in knowledge on diseases/pests and the threats they pose.

The IRA process needs a thorough overhaul as in some cases the length of time required to complete an IRA is so long that by the time it is completed it is outdated.

There appears to be a general indifference at the national level to the threats posed by the imports of seafood in general and the imports of live aquatic life in particular..

- **Are the arrangements for incursions with a principally environmental impact appropriate?**

Possibly. But only where formal structures and cost sharing arrangements exist that recognise environmental pests

The structures that have been put in place, such as the Aquatic CCEAD, state based emergency response plans and AquaPlan appear, so far, to be working but are yet to be really tested.

- **Are risk analyses, import policy determinations and permit conditions sufficiently updated through the monitoring of actual experience in the application of risk management measures? Do the appropriate feedback loops exist and are they effective?**

The answer here is no, see response under monitoring and review mechanisms.

There appears to be a general indifference at the National level to the threats posed by the imports of live aquatic life in particular and the imports of seafood in general, and also to the environmental and economic (including export potential) impacts associated with ballast water and biofouling mediated pests.

- **Are threats to Australia's marine environment and fisheries arising from biofouling on ships' hulls and organisms in ballast water best handled in a quarantine and biosecurity framework, or some other framework?**

Biofouling and ballast water mediated species introductions pose a quarantine and biosecurity risk, and should therefore be managed in such a framework.

The historical focus of Australia's quarantine system has been to protect agriculture and associated export markets. This is an outdated notion that fails to adequately account for the environmental impacts (both aquatic and terrestrial) and economic impacts in aquatic environments. Australia's economy relies heavily on its unique environments, both terrestrial and aquatic (tourism), and as an island nation, relies heavily on shipping and marine transport.

The two statements below were taken from the Biosecurity Australia and AQIS websites respectively. Although notionally including the environment, they highlight the current focus on protecting agriculture and export markets.

*“Biosecurity Australia provides science based quarantine assessments and policy advice that protects Australia's favourable pest and disease status and enhances Australia's access to international animal and plant related markets.”*

*“Australia's export and quarantine laws protect Australia's animal, plant, human health and the environment and they also provide improved market access opportunities for Australian food and other agricultural products. They ensure that export products meet importing countries requirements.”*

## **6. Jurisdictional and institutional arrangements (Section C3)**

As mentioned previously, the level of cooperation between AQIS and DPIFM should be strengthened further. Increased information sharing and policy development will further enhance the relationship.

It is considered that with the separation of BA and AQIS, there has been a separation of technical expertise from the service delivery and the gap appears to be widening.

One observation suggests that an amalgamation of both bodies as has occurred in New Zealand would be investigated.

Post barrier surveillance for targeted plant and animal pests and diseases should be bought together under a coordinated national plan. Increased demands from our trading partners to supply ‘proof of freedom’ is a driver, for such change.

## **7. Culture, efficiency and resourcing (Section C4)**

Where a beneficiary can be identified in the quarantine and export continuum then appropriate fees and charges is supported by DPIFM. However to keep charges to an acceptable level, some form of cross-subsidisation should occur between similar programs eg grains and horticulture exports. This ameliorates fluctuations in revenue when events such as drought occur and exports are reduced.

The question of continuation of the NAQS program has been dealt with earlier.

It is unfortunate that there currently is a culture with AQIS that when a Post Barrier Detection occurs, it is the responsibility of the States and Territories only.

This attitude must change to ensure detections are dealt with in the most effective manner and all important trace back and trace forward function are completed quickly. In the main AQIS is the only organisation that can carry out this function. DPIFM can supply further details of individual examples upon request.

Intervention and effectiveness targets at the border is an area where DPIFM cannot provide meaningful comments other than to add that AQIS must not reduce its staff or activities at

the Border as a result of industry lobbying, and AQIS must ensure that only trained and experienced staff having a culture and values in agriculture perform the Barrier roles. A multi skilled service delivery organisation performing a number of roles at the Barrier is not the optimum service provider.

If there are ongoing policies to provide private quarantine facilities and diagnostic laboratories, then the world's best practice quality management and audit processes need to be applied to ensure that breakdowns in process are minimised to conform with Australia's ALOP.

## **8. Communication and consultation (Section C5)**

DPIFM's view is that Australia's ALOP is understood by sectors of Territory industry but is certainly not accepted. Further targeted activities by AQIS and BA in this area are necessary to improve the situation. The question of providing information to convince industry that Australia must play in the international arena is an ongoing problem. It would be useful to include major industry bodies in a strategy to further educate the Australian rural sectors. There is a general point of view that overseas markets should be more open to Australian products and that the Australian barrier should be tightened further.

DPIFM is aware of many programs instigated by AQIS and BA, but this Department is not called upon to participate so that local knowledge ensure optimum coverage. Programs that are managed and run from Canberra do not in the main meet the objectives of the program.

The most beneficial program that has received recent publicity is the one directed towards the Peri urban sector. Locally the title had to be changed so that it would be acceptable to rural residents.

Communications between AQIS and BA and the Territory's rural sectors are not usually successful. Messages received by the Peak Industry Bodies are not filtered down to local Associations by the Peak Bodies and there does not seem to be an audit system utilised by BA or AQIS to check how programs have been received or whether the objectives were met.

## **9. Research (Section C6)**

It is recognised that there is a wide spectrum of research that is directly or indirectly related to animal and plant health and the quarantine and export continuum. Organisations such as State/Territory agencies, universities, cooperative research centres and private laboratories are participants in the research sector. A national accepted targeted research program is needed urgently. It is important to recognise the link between research and diagnostic capability.

In the main to date there does not seem to be a well funded, well coordinated national research strategy to aid both the quarantine and export programs.

In some areas of Biosecurity the IRA process comes under criticism for implementing policies that are either poorly researched or are not updated due to new research results.

The following is one such example:

The potential of imported fish and aquatic invertebrates, or killed products derived from them to introduce exotic diseases of fish, crustaceans and molluscs into the Australian environment when used as bait or berley is well recognised. The use of live fish, crustaceans or molluscs or their killed products as bait and berley constitutes a higher risk activity with respect to the establishment of disease as it provides a direct pathway for the establishment of infection, ie. direct feeding of potentially infectious material to susceptible hosts. In Australia and elsewhere, examples exist of the introduction of serious diseases through the use of bait and berley.

Similarly, the importation of ornamental fish into Australia is a higher risk activity with respect to their potential to introduce exotic diseases through the intentional or unintentional release into natural aquatic environments. Many examples exist of disease incursions through the translocation of ornamental fish, including a number of significant incursions into Australia.

Although quarantine and biosecurity policies and practices have been developed in recent years to mitigate against disease incursions in imported baitfish and imported ornamental fish, and risk mitigation measures developed; these policies and practices are inadequate and do not afford an appropriate level of protection.

A major issue is the apparent non-responsiveness shown by AQIS/Biosecurity Australia to implement change in the face of evidence of changing circumstances that present a new threat not identified as part of the Import Risk Assessment processes, combined with the IRAs rapidly becoming out-of-date.

### **Importation of non-viable salmonid and non-salmonid marine finfish for use as bait**

Large quantities of bait are imported into Australia to support the commercial and recreational fishing sectors. In July 1999, Biosecurity Australia (BA) released an Import Risk Analysis (IRA) which addressed disease risks associated with the importation of non-viable salmonid and non-salmonid marine finfish for use as bait or for human consumption. This analysis identified diseases of high quarantine concern, identified susceptible fish species with respect to their potential to introduce these diseases of concern into Australian aquatic ecosystems and identified measures that might be employed to mitigate the risks of incursions of these diseases, including removal of viscera and washing. In May 2002, BA released a Technical Issues Paper which addressed disease risks associated with the importation of non-viable freshwater finfish for human consumption and the proposed structure and methodology for an import risk analysis for this product. As for the IRA for the importation of non-viable salmonid and non-salmonid marine finfish, this paper identified diseases of high quarantine concern, identified known susceptible fish species and proposed risk mitigation measures that might be employed to mitigate against the incursion of these diseases, including removal of viscera and heads.

Both the IRA and Technical Issues Paper based their risk analysis on significant pathogens recorded in individual species at that time. No regard was given to those significant exotic pathogens that are not host specific and which would likely be found in species from areas or countries where such diseases are endemic in other species. As well, the limited knowledge regarding the host range of known diseases and the likelihood of new diseases

emerging was not a major consideration. The IRA and Technical Issues Paper are now well out of date with respect to new scientific information and as such are technically flawed. Further, although the IRA stipulates that rapid responses to new information may be implemented, in practice this was found to not be the case, with a failure of AQIS to adequately consider new information relating to exotic pathogens in imported baitfish not considered a higher risk species.

## **Recommendations**

- Capacity be developed to ensure the IRA on non-viable Salmonids and Non-salmonid Marine Finfish is an up-to-date document.
- The IRA on non-viable non-salmonid freshwater finfish be completed and maintained as an up-to-date document.
- Provision be made for immediate review of import practices and requirements for risk mitigation subject to new information with implementation of changes to quarantine and biosecurity requirements as appropriate in response to such new information.

## **Imports of Ornamental Fish**

Some 8-10 million ornamental fish per annum are imported into Australia. These fish originate from multiple geographic locations where major exotic pathogens exist and new and previously unrecognised diseases and parasites are emerging. Although Australia has a import policy including pre-border certification of exporters and mandatory quarantine for freshwater and marine ornamentals, there have been incursions of significant aquatic animal pathogens, with spread of diseases from ornamental fish to farmed native Australian species and free-living introduced species. It is well established through independent studies that pathogens and parasites regularly enter Australia through ornamental fish and that the quarantine period is ineffective in detecting and preventing such incursions. The inappropriate exposure of imported ornamental fish to natural waters provides a direct transmission pathway for these pathogens and parasites to establish in Australian fish species.

The underlying import risk analysis on which quarantine policies and practices for imports of ornamental fish are based have not provided a level of protection consistent with development of future aquaculture industries and maintenance of biodiversity. The plethora of ornamental species and the paucity of data on the pathogens they may carry significantly limits the validity of the risk analysis process. DPIMF considers the risk analysis process as applied to ornamental fish is significantly flawed and is inappropriate to properly identify hazards and assess risk. Further, the IRA on imports of live ornamental finfish was finalised in 1999 and is now out of date.

Continued incursions and establishment of exotic pathogens and parasites as a result of ornamental fish imports cannot be excluded by current controls. To limit incursions of aquatic animal pathogens, adaptive biosecurity risk management approaches that include emerging biosecurity hazards and a precautionary approach for ornamental finfish must be adopted.

## **Recommendations**

- The IRA on imports of live ornamental fish be brought up-to-date.
- Mechanisms whereby quarantine and biosecurity are failing to protect Australian fisheries resources from incursions of disease through imported ornamental fish be identified.
- Contemporary risk mitigation measures be developed and implemented for to allow the importation of ornamental fish with an appropriate level of protection.

Funding for such research is always the basis for debate between industries and between governments.

A creative suggestion for funding of research directed at the national good, is that the Commonwealth introduce policies that culminate in the setting aside of a certain percentage of the Goods and Services Tax to fund quarantine research projects that are for the national benefit.

## **10. Review (Section C7)**

Any future monitoring of the quarantine and biosecurity continuum should consider all aspects of pre border, border and post border activities and their inter relationships. Any recommendations for change in one area must be carefully considered for their impact on related activities.

It would seem that many of the reviews and audits result from Federal Government policies and procedures. DPIFM cannot provide meaningful input into this section other than to add that reviews that do not produce positive change and are performed only because the rules state so, are meaningless and time wasting therefore the rules should be changed.