

## Joint industry Submission to the Senate Inquiry on Biosecurity and Quarantine Arrangements

*Terms of reference:*

- a) *the adequacy of current biosecurity and quarantine arrangements, including resourcing;*
- b) *projected demand and resourcing requirements;*
- c) *progress toward achievement of reform of Australian Quarantine and Inspection Service export fees and charges;*
- d) *progress in implementation of the 'Beale Review' recommendations and their place in meeting projected biosecurity demand and resourcing; and any related matters.*

### 1. Introduction - The National System for the Prevention and Management of Marine Pest Incursions

Invasive pest species have been identified as a key environmental and economic threat to aquatic environments worldwide. Marine pests are spread via a range of human activities and vectors including, aquaculture, commercial shipping and other commercial vessel activities, recreational and commercial fishing, recreational boating and diving and trade in live aquarium species.

In Australia, marine pest response and control exercises have cost \$2M following the incursion of the Black Striped Mussel in the Northern Territory and over \$10M in South Australia following the incursion of *Caulerpa taxifolia*.

Internationally, individual pest species incursions have resulted in costs of over US\$1 billion per annum to industries where the costs are then ongoing (eg Zebra Mussel in the Great Lakes, Canada).

The National System for the Prevention and Management of Marine Pest Incursions (the National System) was developed by all jurisdictional governments in close consultation with industry through the National Introduced Marine Pests Coordination Group (NIMPCG) to manage these threats. NIMPCG is a consultative forum where jurisdictional representatives are expected to bring a whole of government approach in developing the National System in conjunction with industry.

The National System has a broad charter for:

- Prevention – systems to reduce the risk of introduction and spread of marine pests, including management arrangements for ballast water and biofouling.
- Emergency management – a national response mechanism to control or eradicate pests that do invade.
- Ongoing management and control - management of marine pests already here, where eradication is not feasible.

### 2. Progress on Implementation

*Relevant Term of Reference*

a) *the adequacy of current biosecurity and quarantine arrangements, including resourcing;*

The ports and shipping industries have been involved with NIMPCG since its inception in 2001 and in its previous forms for many years prior. In that time the Commonwealth has taken the lead in facilitating a consultative process and outlined programs to address marine pest issues. However, the state jurisdictional representatives attend meetings claiming lack of resources to implement commitments and representatives are unwilling or unable, to make key decisions. This has resulted in an unacceptable lack of progress in that time leaving industry to deal with a damaging degree of uncertainty.

The Natural Resource Management Ministerial Council (NRMMC) agreed in October 2003 that the National System would be phased in over a three year period. The 2005 Intergovernmental Agreement on a National System for the Prevention and Management of Marine Pest Incursions (Marine IGA) set out the roles and responsibilities and policy framework for the development, implementation and continuous improvement of the National System. NSW was the only jurisdiction yet to sign the IGA, but continues to participate in the development of the National System.

In 2006, NRMMC and the Australian Transport Council (ATC) agreed to an initial package of National System measures which included voluntary biofouling guidelines and a communications strategy. These agreed measures, while necessary, have provided no certainty for industry as regulations on ballast water and biofouling, while proposed, have not been implemented.

The Marine IGA has now been superseded by the National Environmental Biosecurity Response Agreement and the Intergovernmental Agreement on Biosecurity (IGAB) which are being developed as part of the implementation of the Independent Review of Australia's Quarantine and Biosecurity Arrangements Report to the Australian Government. On 23 April 2010 the Primary Industries Ministerial Council endorsed the draft Intergovernmental Agreement on Biosecurity for consideration by COAG and noted it provides a blueprint for governments to collectively use their resources to ensure that Australia maintains its favourable biosecurity status.

While the IGAB aims to strengthen the working partnership between the Commonwealth, state and territory governments, identifies the roles and responsibilities of governments and outlines the priority areas for collaborative effort to improve the national biosecurity system, funding and resourcing for implementation of the National System appear to remain an issue for jurisdictions. A lack of funding and resources allocated by the jurisdictions has hampered progress with delivering on National System obligations, and is most notable in the area of monitoring.

### **3. Ballast Water**

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Beale Review Recommendation 4 stated that "The Commonwealth should extend its legislative reach to cover the field with respect to international and domestic ballast water regulation."

This recommendation is strongly supported by the ports and shipping industries, but it is concerning that this recommendation has not progressed in any way beyond the Commonwealth indicating in principle support.

### **4. Biofouling**

There is a clear operational incentive to keep a vessel's hull free of fouling. The increased frictional resistance that results from marine organism accumulation on the hull and within niche areas (such as engine room cooling intakes) has a severe impact on fuel efficiency and other operational parameters. Commercial vessel operators, at great expense, apply technologically advanced antifouling coatings at dry-dock to avoid biofouling accumulation – there is a direct and easily calculable payback in reduced fuel consumption.

However vessel operations may dictate that, at least to some degree, the level of biofouling present on the underwater surfaces is out of the control of the operator. The implementation of best practice and the application of the highest quality antifouling paints in accordance with all the recommendations and guidelines available can only go so far in preventing biofouling growth in the face of operational limitations. For example,

a vessel that is painted with antifouling paint suited to its active operational profile will become fouled if it is required to await a berthing window at anchorage for weeks on end.

Regulation designed to manage biofouling for the commercial sector must be *consistent* around the country, *risk based* and *practical*. It must take into account the international nature of the commercial shipping industry and recognise commercial realities and what is actually achievable by both government and industry.

All state jurisdictions must work with the Commonwealth and industry to develop a single approach to biofouling regulation that satisfies all parties.

## 5. Monitoring

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An effective monitoring program is a key element underpinning any regulation incorporated as part of the National System. Monitoring increases the chances of early detection and proves ongoing presence or absence of target species. This is necessary where there are costs to industry and the community of undertaking measures to prevent the introduction and spread of species to new areas.

Monitoring in the 18 National Monitoring Network (NMN) locations to support the risk based ballast water ballast water management system for commercial shipping in the absence of available ballast water treatment technology was mandated by the NRMMC in 2006. In accordance with this agreement, monitoring is required to be undertaken every two years and funded by the state jurisdictions. It has also been agreed that costs could be recovered on a 'beneficiary pays' basis.

There are now a range of ballast water treatment technologies available which when installed and operated will remove the marine pest risk from ballast water discharge. However, the availability of treatment technology for all vessel types is still a few years off and it is likely that a risk based system for ballast water exchange will still retain relevance for some trades.

However, monitoring continues to be very important in underpinning the National System where the focus is now moving to biofouling as a vector. The development of failsafe measures to control biofouling are proving to be challenging and, for some sectors such as the offshore oil and gas industry, extremely costly. Ensuring continued absence of target species in locations through monitoring is necessary in order to justify the ongoing high costs borne by some sectors of industry as a result of extreme biofouling management requirements being enforced by some jurisdictions such as Western Australia.

However, due to the excessive costs associated with monitoring, previously collected data about pest species in 17 out of the 18 NMN locations is now over 12 years old and new monitoring to update the data, according to the NRMMC mandate in 2006, should have occurred 36 months ago. Only South Australia has undertaken monitoring as agreed.

While acknowledging the significant costs associated with conducting biennial monitoring, the ports and shipping industries are concerned at the lack of resources allocated by the other state jurisdictions to the actions agreed by the IGA.

The previous monitoring data has now been formally declared out of date and the NMN locations are now considered High Risk. This would require all vessels to undertake ballast water exchange for all domestic vessel movements if domestic ballast water controls were to be introduced in all jurisdictions today at a cost of up to \$529,000 per annum per vessel.

In the most part this will be an unnecessary additional burden born by industry as a result of state jurisdictions not funding their obligations under the agreed National System.

Beale Review Recommendations 3 and 74, deal with the extension of the Commonwealth reach into resourcing post border monitoring and surveillance and procuring matching commitments from the states and territories. This recommendation has not been implemented to date and must be as a matter of urgency.

The South Australian Government has proposed an alternative to the traditional monitoring program which will significantly cut costs and potentially provide more accurate and timely monitoring data and is developing the 'Australian Testing Centre for Marine Pests'. The shipping and ports industries are strongly supportive of this approach to satisfying the monitoring requirement of the National System.

#### *5.1 The Australian Testing Centre for Marine Pests*

Frustration with the delay, cost and lack of nationally available taxonomic expertise to identify marine pests in Australia led the Department of Primary Industries & Resources SA (PIRSA) in conjunction with the SA Research & Development Institute (SARDI) to establish the Australian Testing Centre for Marine Pests (ATCMP). The ATCMP has a project underway aiming to sample the 18 NMN locations for the 7 introduced marine pests specifically identified for ballast water regulation under the National System.

The ATCMP has developed the capacity to survey and perform identification for the current priority marine pest species using accepted standard real time PCR - DNA identification techniques. The ATCMP has the support of scientists and government Australia - wide. The techniques used by the Centre have been formally approved by the National Introduced Marine Pests Coordination Group (NIMPCG). NIMPCG is a group representing all jurisdictional governments and key stakeholder groups responsible for the marine environment to facilitate the National System.

Lack of resources by jurisdictions has been identified as the key reason why mandated marine pest monitoring has been delayed as the previously estimated costs of traditional monitoring have proven to be excessive. However, the costs of testing for identification at the ATCMP using DNA techniques can be as low as 10% of the costs of the less robust traditional identification techniques.

A commitment is required by Ministers and all relevant federal, state and territory government departments to support the project and allocate resources accordingly. Jurisdictions have agreed their support for the ATCMP project 'in principle' through the National System (December 2009 and April 2010). However, funding will be required to support the project which is currently under-resourced.

The ports and shipping industries support the ATCMP project as the only viable way to progress marine biosecurity and the National System for Marine Pest Incursions. The ports and shipping industries ask that the Committee support the current ATCMP project with the required resources.

The ATCMP project currently represents the only feasible option to begin the NMN and until Australia-wide NMN monitoring is undertaken, the risks of invasive species translocation through shipping ballast water will be unmet.