

Inquiry into Biosecurity & Quarantine Arrangements

The Rural and Regional Affairs and Transport References Committee



National Centre for Maritime Training (Ocean)

Ports and Shipping Division

Submission

4 August 2010

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AMC – Ports and Shipping – Submission:

The report attached to this document at Appendix 1 is taken from the Australian Quarantine and Inspection Service (AQIS) website.

Terms of reference of the Committee:

- 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.

Executive Summary:

Australia is losing the battle against incursions of foreign pests and diseases through her borders.

Recent examples of Quarantine / Biosecurity failures include the recent incursion of Equine Influenza through the Quarantine Station at Eastern Creek, NSW; the poor management of Swine Flu that was evident in allowing passengers from the cruise vessel 'Pacific Dawn' to disperse to widespread locations around Australia and thereby expose the Australian general public to contact with persons likely to be infected with the virus; the slow response to the discovery of Fire Ants in Queensland that has allowed that pest to become heavily entrenched in the Australian environment – perhaps to an ineradicable stage.

Australia's Quarantine / Biosecurity task is indeed a large one.

Australia:

Australia is the world's smallest continent. Australia, for its geographical size, also has a relatively small human population of around 21 million.

With a land area of 7,617,930 square kilometres and a coastline length of some 25,760 kilometres (Wikipedia), Australia is a large island. As such, the nation depends heavily on shipping - by which means more than 95% of goods that enter and leave the country are transported.

An idea about the increasing demand for Quarantine / Biosecurity Officers may be gleaned from the following.

The Australian merchant fleet has dwindled over the last few decades. The nation therefore depends heavily on foreign shipping to transport Australian goods produced for export – including some 600 million tonnes of dry bulk commodities such as iron and other ores, coal and agricultural products.

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Australia also depends on foreign ships to deliver imported goods – mainly in shipping containers.

Finished goods, seafood, meat and other Australian produced goods are mainly exported in foreign container vessels.

In the Calendar Year of 2000, according to figures supplied by the AQIS Seaports Programme, the number of vessel arrivals from overseas into Australia's proclaimed ports was around 12,000. In the Calendar Year of 2009, that number had increased to around 15,000. This represents around a 3% increase in shipping traffic every year over the intervening nine years.

Preamble - A Mariner's Perspective:

The Australian Maritime College (AMC) located near Launceston, Tasmania, is an institute of the University of Tasmania. AMC provides tertiary education in maritime studies. AMC teaches the entire range of skills required by seafarers - from pre-sea training for integrated ratings and officer cadets, through to the internationally recognised certificates of competency required by international treaty to be held by persons taking charge of and manning ocean going ships.

In addition NCMCRS provides education in marine science under the auspices of AMC.

This submission to the Committee is prepared by AMC Ports and Shipping – Maritime Training (Ocean) Division. As such, the submission is mainly from a mariner's perspective.

AMC notes that AQIS is the lead Australian government agency responsible for regulating Australia's international borders – including the sea borders – to prevent the importation of exotic pests, pathogens and diseases that are not indigenous to Australia.

Having duly considered the Terms of Reference of the Committee of Enquiry, AMC has formed the opinion that its response should be confined mainly to the first term of reference cited above.

As a centre for higher education, AMC has confined its comments only to the recruitment and training of quarantine (or biosecurity) officers and to some changes in the status quo that appear to be necessary and appropriate.

AMC offers a single development concept. That concept is supported by the arguments contained in the body of the text that follows this Executive Summary.

AMC would be pleased to assist in the development of the required training regime suggested below if this were deemed desirable.

Development Concept:

AMC suggests that the style of personnel recruitment and competency based training, which has been proven so successful in the maritime industry over many decades, should be adapted and adopted for the national biosecurity regime.

End of Executive Summary

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The AMC Response:

There are several parallels that can be drawn between the types of person that choose to be seafarers and those that choose to be Quarantine / Biosecurity officers:

Both of these callings are 'vocational' – few of those that remain in either career are 'time servers' or 'only in it for the money'. Most seafarers, like their counterparts in the Australian Quarantine and Inspection Service are committed to what they do and they are passionate about doing it well.

Both careers rely as heavily on practical knowledge and experience as they do on academic learning.

Those that go to sea as deck or engineering officers may be said to embark on a ten year apprenticeship that may lead to a First Class certificate of Competency as a Master Mariner or Marine Engineer. That said, many seafarers do not aspire to obtaining the higher levels of qualifications available and remain content to perform functions on board or in related shore-based occupations at lower levels.

A seafarer's career commences with a fairly short period of induction training (three months) spent in a shore establishment followed by a longer period of on-the-job-training, spent at sea, to learn the trade 'hands on'. Periods of study ashore follow for those that wish to progress to higher levels in the shipboard hierarchy.

A number of intermediate qualifications need to be obtained, one after another, on the way to achieving the highest qualifications for mariners and engineers.

After completion of each qualification – seafarers are required to return to sea to gain more experience at higher levels. After having obtained a first qualification, trainees are considered competent to take a more active role in the running of a department on board ship. The remuneration increases and qualified persons are entitled to the full range of benefits enjoyed by other qualified persons that operate the ships.

It has often been said that an officer should never instruct a crew member to do something that they have not previously done themselves. The essence of this perspective is that without having experienced what is involved in a task, a person cannot appreciate the levels of difficulty; skills; standards of physical strength and fitness; that are necessary to complete a given task.

All crew members on board an Australian ship can rest assured that the master and engineering officers that run the vessel and give the instructions have been able to demonstrate a certain level of competence through experience and also through written and oral examinations in order to obtain the certificates of Competency that enable them to sail in their positions on board. Seafarers' qualifications are governed not only by national standards but also by international treaty - the International Maritime Organisation's (IMO) 'Safety Training and Certification of Watch-keepers (STCW) Convention of 1995.

The Australian Quarantine and Inspection Service (AQIS) recruits front line personnel mainly at post graduate level. Preference is given to those who have obtained degrees in areas related to Environmental Studies.

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AQIS officers commence operations under the supervision of more experienced officers who are usually older than themselves.

AQIS operates a range of divisions that specialise in the various aspects of the organisation's functions.

Those functions include:

- Dealing with personnel and their effects on board internationally plying vessels calling at Australian ports (AQIS Seaports Programme)
- Dealing with passengers and their effects arriving in Australia on international flights (AQIS Airports Programme)
- Dealing with goods imported into Australia by air and sea (AQIS Import Clearance and Mails Programmes)
- Dealing with the inspection and certification of Australian food exports – e.g. seafood, meat, livestock, grain, fresh produce (AQIS Exports Programme)

Significant levels of experience and expertise are required of the Quarantine / Biosecurity Officers that fulfil the functions outlined above.

At AQIS management level, recruitment is conducted from all sources including other government departments and the private sector. Some very few of the AQIS managers at the executive and senior executive levels have been promoted through the ranks from the front line.

Most of the AQIS managers at executive and senior executive levels come to the service with no specialist expertise of what AQIS has to do – most are qualified as 'managers' rather than as AQIS Officers.

In spite of the non-cohesive infrastructure of AQIS, the agency performs at a high standard in general.

On the other hand, there have been a significant number of Quarantine / Biosecurity failures in recent years and a much larger number of 'near misses'. Some of those failures were referenced in the Executive Summary. They rated headline coverage in the national press and did much to damage AQIS's reputation. The general public does not always hear about near misses or less emotive incursions. The generally high level of performance by AQIS is mentioned by the media even less often.

It seems likely that the kinds of failures by Quarantine / Biosecurity referenced above could be avoided if the AQIS workforce was trained from the ground up in how to protect Australia's borders.

A proposed training structure for Quarantine / Biosecurity Officers is detailed below. It is important to note that the Recognition of Prior Learning would play an essential part if the proposed new training methodology were adopted. New entrants would not be qualified to the highest level for at least ten years from the inception of the proposed new training regime. Existing officers would

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therefore need to continue in their roles but should receive recognition for their expertise gained through experience and delivered in the field to the nation over the years.

Training of AQIS Personnel:

This part addresses the Committee's first stated term of reference and supports AMC's arguments for adopting the Recommendation as stated in the Executive Summary.:

a) The adequacy of current biosecurity and quarantine arrangements, including resourcing.

AMC suggests that a major shift in perspective by the Australian Quarantine and Inspections Service (AQIS) is both appropriate and necessary in the matters of recruitment and training of personnel.

The recruitment of Quarantine / Biosecurity Officers should be from school leavers rather than from post graduates as is currently the case.

New entrants into AQIS should commence work as cadets and be required to conduct basic training prior to taking up roles in the AQIS workforce under supervision. A period of three months' basic training is recommended. Examinations after the basic, theoretical training should lead to the award of a 'Certificate 1 or 2 in Quarantine / Biosecurity' (yet to be developed).

During the supervised phase of working with AQIS, cadets should be required to complete Tasks and Guided Studies (TAGS) books for sign off by their supervisors to demonstrate that they have received hands on training and supervision and demonstrated competence in the workplace.

In their first year, Cadets should be rotated through the various programmes operated by AQIS to gain broad knowledge in about half of the areas that make up the AQIS function.

It is suggested that the first period of supervised operations should last for one year. Thereafter, cadets should return to college for three months to study theoretical aspects of the specific parts of the AQIS task in which they have been participating under supervision. Examinations of cadets' knowledge should be conducted after this first return to college. A 'Certificate 3a in Quarantine' should be developed to award to persons successfully completing their prescribed period of service, TAGS record books and examinations at the end of their time at college.

Cadets should then return to the workforce for a further year and complete supervised training and further TAGS in the other half of the areas that make up the Quarantine / Biosecurity function.

Thereafter, a further return to college for theoretical training followed by examinations leading to 'Certificate 3b in Quarantine' should be required.

Cadets successfully completing parts 3a and 3b in Quarantine / Biosecurity should be awarded 'Certificate IV in Quarantine / Biosecurity' – a qualification to be recognised under the Australian Qualifications Framework (AQF).

So far, cadets would have needed to be in the AQIS workforce for at least two years and nine months.

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It is suggested that AQIS cadets should receive no annual leave during the period of cadetship up to obtaining Certificate IV in Quarantine / Biosecurity. Working hours should be restricted during cadetship to 30 hours a week of supervised training in the workplace plus a further ten hours a week of understudy work in a regional or the central AQIS office environment – with particular reference to the underpinning legislation (currently *The Quarantine Act, 1908* as amended and its subordinate legislation). Cadets should be encouraged to put in their own hours of private study and should be mentored during periods of service in the field.

On successful completion of Certificate IV Cadets should be given three months paid leave at the rate of pay of APS level 4 officers.

Returning to the workplace after taking that leave, newly qualified officers should be entitled to join the operational workforce in any area as required at APS level 4.

By these means, Australia could be assured that any person wearing the uniform of an AQIS officer had received appropriate training in the task they are appointed to fulfil.

Higher Qualifications:

A broad range of opportunities is available for discussion about higher levels of qualification in Quarantine / Biosecurity functions. AMC recommends that documented periods of operational service as a Quarantine / Biosecurity officer should be a prerequisite for candidates wishing to pursue further studies / higher qualifications – for example:

- Certificate IV plus eleven months' service could entitle candidates to one month's full time, paid, study leave and an attempt at 'Diploma in Quarantine' – recognised under the AQF. This qualification has not yet been developed. The minimum period between recruitment and achieving a Diploma is four years.
- Above the Diploma level, Quarantine / Biosecurity officers might need to specialise in one or two areas of the Quarantine / Biosecurity function and thereafter sit examinations to qualify for the Advanced Diploma – equivalent to a bachelor's degree. A period of three months' study leave would seem appropriate for this task and 12 months of service could be the prerequisite for obtaining that study leave.
- The possession of an Advanced Diploma (bachelor's degree) would be the path that would lead to an opportunity for a person to undertake studies leading to examination for the highest qualification in the Quarantine / Biosecurity stream 'Master of Quarantine / Biosecurity'.

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Appendix 1

Department of Agriculture, Fisheries and Forestry

Special report: Review of Australian quarantine and biosecurity ('Beale review')

On 18 December 2008 the Australian Government released the independent review of Australia's quarantine and biosecurity arrangements by a panel chaired by Mr Roger Beale AO.

The review concluded that Australia's biosecurity system is good—often the envy of other countries—but far from perfect. It recommended significant changes to improve the system's ability to deal with changing and increasing biosecurity risks.

The changes include:

- improved partnerships with the states and territories and with industry
- enhanced governance structures, including an independent commission to assess the biosecurity risks of imports
- a national authority to undertake biosecurity operations and an Inspector General of Biosecurity to audit the authority's work
- a risk–return approach to biosecurity operational activities
- new biosecurity legislation to replace the *Quarantine Act 1908*
- more funding for biosecurity activities and upgraded information technology systems.

The government has agreed in principle with the proposed reforms and work has begun within the department to progress implementation.

A national agreement on biosecurity is being negotiated with the states and territories that will help shape an improved national system.

New biosecurity legislation is being drafted that will draw on broader constitutional powers and provide for more effective management of biosecurity risks.

The department is putting interim administrative arrangements in place:

- a Biosecurity Advisory Council to replace the Quarantine and Export Advisory Council
- an Interim Inspector General of Biosecurity
- the inclusion of economic expertise to enhance the Eminent Scientists Group
- a new Biosecurity Services Group within the department that brings together biosecurity functions, taking effect from 1 July 2009.

Work is under way on redesigning information technology systems and developing the methodology for a risk–return approach to biosecurity activities.

The status of quarantine stations and their future management arrangements are being reviewed.

The Beale report and links to the government response are at www.quarantinebiosecurityreview.gov.au.