The Commonwealth government has accepted the basic tenets of the report of the Australian Quarantine Review (the ‘Nairn Review’), except for the recommendations to establish a statutory authority. Australia will maintain its existing high standards of quarantine and enhance activities such as community awareness, manageable risk (based on science), protection of Australia’s unique environment, external input to policy formulation, and recognition of the continuum of quarantine (pre-border, border and post-border). Greater emphasis will be given to improved consultation in risk analysis, increased monitoring for pests and diseases, and enhanced national preparedness and response capacity (especially for plants and aquatic animals).

1. Introduction

Events during 1997 such as the incursion of fireblight in botanic gardens in Melbourne and Adelaide, the challenge in the World Trade Organization (WTO) to Australia’s decision to refuse imports of fresh salmon meat from North America and the slaughter of poultry in Hong Kong to contain a strain of avian influenza transmissible to humans have ensured that quarantine-related issues continue to attract strong media interest and that quarantine remains high on the policy agenda. Some twelve months after the Australian Quarantine Review (commonly referred to as the ‘Nairn Review’ after its chairman, Professor Malcolm Nairn) was completed, it is timely to ask: what has been the government’s response to the Nairn Review? How is the Nairn Review likely to affect Australia’s quarantine policies?

This article addresses these questions by first briefly reviewing the main background to and the main tenets underlying the Nairn Review and then examining the government’s response to it. The article examines progress in
implementing the review’s recommendations and concludes with some comments on the likely impact of its implementation on Australia’s quarantine policies and procedures.

2. The Australian Quarantine Review (the Nairn Review)

During the early 1990s, the efficacy of the Australian Quarantine and Inspection Service (AQIS) — the organisation responsible for the development and implementation of Australia’s quarantine policy and programs — was called into question by the entry into Australia of a large number of exotic pests and diseases, including papaya fruit fly, Siam weed, chalkbrood, northern Pacific starfish and Japanese encephalitis. Concern about the adequacy of the Australian quarantine system was exacerbated by controversy concerning the entry conditions for a number of products including cooked chicken meat, fresh salmon, apples and pigmeat. The inability of the AQIS staff and industry representatives to reach common ground for deciding issues on their scientific merit attracted considerable media attention and resulted in a highly politicised and public debate on entry conditions (Nairn et al. 1996, p. 3).

The erosion of confidence in the Australian quarantine system coincided with a number of major developments in world trade and other quarantine-related areas, including:

- the conclusion of the Uruguay Round, which opened up trade opportunities and enhanced exporters’ expectations with respect to market access;
- the negotiation of the Agreement on the Application of Sanitary and Phytosanitary Measures (the SPS Agreement), which defined the rights and obligations of members of the WTO with respect to the development and implementation of quarantine controls;
- the increasing use of the ‘clean, green’ reputation by food exporting nations such as Australia, partly in response to increased consumer concern for food safety;
- rapid increases in the volume of world trade and international passenger movements (in the order of 10 per cent per year); and
- significant scientific advances in surveillance and identification techniques for animal and plant pests and diseases.

(Nairn et al. 1996, pp. 3–4)

In response to mounting criticism of the Australian quarantine system not only from primary industry groups but also from the scientific community and the public, the then government acted in December 1995 to commission an independent review of Australia’s plant and animal quarantine policies.
and procedures, chaired by Professor Malcolm Nairn. The review was subsequently endorsed by the new Minister for Primary Industries and Energy (the Hon. John Anderson MP) and the Nairn Review’s report — *Australian Quarantine: A Shared Responsibility* (Nairn et al. 1996) — was presented to the Minister in November 1996.

The Nairn Review recommended fundamental changes to the culture of quarantine and the way in which quarantine policies are developed and implemented. A fundamental element underlying the Nairn Review’s recommendations was the need to develop a ‘partnership’ between industry, governments and the wider community in order to achieve the objectives of quarantine in the light of Australia’s international obligations and the pressures emanating from increasing levels of world trade and tourism. The basic tenets of the Nairn Review can be summarised as follows:

- development of a partnership approach to quarantine policies and programs involving the whole Australian community — the general public, industry and governments;
- establishment of a statutory authority to develop national quarantine policy and ensure national delivery of quarantine services;
- establishment of a more balanced approach to animal and plant health and quarantine by providing additional inputs for plant health and quarantine;
- development of a more formally structured process for conducting risk analyses to provide a scientifically based foundation for a policy of manageable risk;
- acknowledgment of the importance of quarantine to the natural environment;
- expansion of the scope of quarantine by recognising the importance of activities in all three elements of quarantine — pre-border, border and post-border — as a continuum; and
- enhancement of the focus on pre-border and post-border activities of the continuum of quarantine in the achievement of Australia’s quarantine goal.

*(Nairn et al. 1996, pp. 11–12)*

In all, the Nairn Review made 109 recommendations covering all aspects of quarantine, including recommendations for increased government funding.2

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1 For the Nairn Review’s terms of reference, see Nairn et al. (1996), pp. 4–5.

2 For an overview of the recommendations see Nunn (1997) and Tanner (1997).
3. The government’s response

The report of the Nairn Review was released by the Minister for Primary Industries and Energy in December 1996, but it was not until August 1997 that the government released its official response (DPIE 1997). The government’s response was a joint response to the Nairn Review and to the report of a government–industry National Task Force on Imported Fish and Fish Products, which reported to the government in December 1996 (DPIE 1996). This task force had been established in June 1995 to examine issues related to imports of aquatic animals and their products — particularly quarantine issues raised in a major scientific review of aquatic animal health and quarantine (Humphrey 1995) and the recommendations of a national working party that examined this review (Nunn 1995).

In the interim, the government had indicated at the time of the Federal Budget that additional funds would be made available for quarantine; thus some of the recommendations were already being implemented before the release of the formal response. In its response, the government accepted the basic principles and major recommendations of both reports, with the exception of the recommendation to set up a statutory authority to be responsible for quarantine policy and delivery. Instead, the government acknowledged the Nairn Review’s theme of quarantine as a shared responsibility by establishing the Quarantine and Exports Advisory Council (QEAC) to provide enhanced external input to quarantine policy. In presenting its response, the government clearly indicated that Australian quarantine policy must take account of developments in the ‘global marketplace’ and balance the primary objective of quarantine (that is, the protection of humans, animals, plants and the environment) with ‘broader trading and national interests’. Australia must ‘accept the international rules with which we expect our trading partners to comply’ and base quarantine decisions ‘on the weight of scientific evidence and judgement’. The government’s assessment is that ‘Australia’s quarantine policy has served us well’ and its aim is ‘to take our current approach and build on it’ (DPIE 1997, p. 8).3

The government’s response indicated that additional funding of about A$76 million over the next four years will be provided to enhance Australian quarantine, with particular emphasis on increasing community awareness, manageable risk (based on science), protection of Australia’s unique

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3 The government’s assessment of the effectiveness of Australia’s quarantine included consideration of four studies on incursions commissioned by the Nairn Review. These studies showed that the rate of incursions had not increased in the past 25 years, with the possible exception of weed incursions (see Nairn et al. 1996, Appendix B).
environment and recognition of the continuum of quarantine (pre-border, border and post-border). Greater emphasis will be given to improved consultation in risk analysis, increased monitoring for pests and diseases, and enhanced national preparedness and response capacity (especially for plants and aquatic animals). The provision of additional funding together with refocusing of strategies mean that all but a small number of the Nairn Review’s recommendations can be implemented. Among the recommendations not accepted by the government are those relating to the statutory authority, disinfection of aircraft, disposal of aircraft galley waste, establishment of a key centre for quarantine-related risk analysis, and external inspection of all containers at port of entry.4

The government accepted the underlying rationale of the Nairn Review that quarantine is a ‘shared responsibility’ and with that shared responsibility comes the need to share the costs of implementing quarantine programs. Of the A$76 million additional funding, A$50.7 million will be provided by the government, with the remainder being recovered from industry through the application of AQIS’s existing full cost-recovery policy.5

In its response to the Nairn Review, the government indicated that it had been guided by ‘seven key quarantine themes’:

- managed risk (based on science);
- a continuum of quarantine (pre-border, border and post-border);
- community responsibility;
- consultative decision-making;
- external input to quarantine policy;
- enhanced capacity in plant and fish quarantine protection and policy; and
- delivering quarantine objectives.

(DPIE 1997, p. 9)

These quarantine themes and the government’s response to the major recommendations of the Nairn Review relating to these themes are discussed below.

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4 Additional funding has been provided to AQIS to increase container inspections, based on targeted risk assessments. The government’s response rejected the Nairn Review’s recommendations concerning aircraft disinfection and disposal of galley waste ‘pending further scientific assessment’ (DPIE 1997, p. 52, p. 54). A government–industry working group is currently examining what scientific assessment should be undertaken in relation to these recommendations.

5 For details of the allocation of additional funds to major functional areas, see DPIE (1997), p. 10.

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3.1 Managed risk

The Nairn Review examined the application of risk analysis to animal and plant quarantine. It also examined the import risk analysis process used by AQIS (AQIS 1991) and considered many submissions that commented on various aspects this process. It identified a number of fundamental principles that should apply to import risk analysis, similar to those that apply to risk analysis in other disciplines such as food safety (ANZFA 1996) and environmental sciences (Norton, Beer and Dovers 1996). These principles include:

- consultation;
- scientific basis and political independence;
- transparency;
- consistency and harmonisation;
- subject to appeal on process; and
- subject to periodic external review.

The government’s response endorsed these principles and outlined an import risk analysis process incorporating these principles and consistent with the approach proposed by the Nairn Review (DPIE 1997, p. 21). Some minor changes of detail primarily were made to account for the decision not to establish AQIS as a statutory authority but to appoint an advisory council (QEAC) that will, inter alia, ensure a mechanism for adjudicating on any appeal (DPIE 1997, p. 18).

The major differences between the new arrangements for import risk analysis and previous AQIS practice are in the duration, timing and amount of consultation, and provision for an appeal mechanism. The process provides a transparent framework for import risk analysis that the Nairn Review acknowledged may require fine-tuning to take account of experience with its application. Under the new arrangements, the Minister for Primary Industries and Energy remains responsible for ensuring both the implementation of government policy on quarantine and that due process is followed in quarantine decision-making.

The vast majority of import access requests are routine and AQIS will continue to address these by a process of in-house risk analysis, which is also called ‘routine’ risk analysis in the government’s response. AQIS will coordinate and chair a Risk Analysis Panel (RAP) for those import access requests that do not fit the criteria for an in-house risk analysis and require a more detailed risk analysis by scientific experts from within and outside AQIS. The government’s response described such cases as ‘non-routine’ or involving ‘variations in established policy’ (DPIE 1997, p. 23). RAPs have already commenced on a number for import access requests, including feed grains and several aquatic animal products (see section 3.6).
Where necessary, a RAP will appoint or contract expert Working Parties to complete specific components of a detailed risk analysis. RAP Working Parties will be chaired, convened and managed by an appropriate expert from outside AQIS. Each Working Party will be chaired by an appropriate professional officer from one of the specialist groups within the Commonwealth Department of Primary Industries and Energy (DPIE) and include at least one member from AQIS and, where appropriate, industry experts. Thus a specialist scientist from the Bureau of Resource Sciences will normally chair each RAP Scientific Working Party, and a specialist economist from the Australian Bureau of Agricultural and Resource Economics will normally chair each RAP Economics Working Party.

The government has endorsed the Nairn Review’s conclusion that for quarantine risk analysis the pertinent concept is one of ‘manageable risk’—not ‘no risk’ (which is unachievable) or even so-called ‘acceptable’ or ‘minimum’ risk. It has developed a process to ensure that stakeholders (including farmers, processors, importers, exporters, consumers, scientists and governments) are fully involved in determining who should participate in making this judgment. Community and stakeholder understanding of the risk analysis process will be facilitated by an educational program, including circulation of a handbook on risk analysis, a draft of which has been prepared and is now being finalised. Consistency of application of the concept of manageable risk will be achieved by reference to existing Australian policies and procedures, by reference to relevant international standards, guidelines and recommendations, and through the contribution of experienced risk analysts.

Apart from its recommendation on a statutory authority, only one other of the Nairn Review’s recommendations on risk analysis was not specifically funded in the government’s response—that a key centre for quarantine-related risk analysis be established. The government’s response indicated that instead of establishing such a centre, AQIS and the Bureau of Resource Sciences will continue to develop risk assessment methods within the additional resources provided for risk analysis (DPIE 1997, p. 49).

3.2 A continuum of quarantine

The government endorsed the concept espoused by the Nairn Review that quarantine needs to be seen as a continuum of activities involving pre-border measures to reduce the threat of entry, well-targeted border controls and post-border measures such as monitoring and surveillance to detect incursions at an early stage, backed-up by emergency response plans to contain, control or eradicate pests and diseases when incursions occur. The Nairn Review highlighted the need for greater focus to be placed on pre-border and post-border measures and was particularly critical of the lack of contingency
planning for plant and fish diseases. The government’s response on plant and fish quarantine is discussed in section 3.6.

The Nairn Review emphasised the importance of managing quarantine risks offshore by ‘effectively pushing back the “border” and decreasing the “pool” of threat in neighbouring countries and countries that have significant contact with Australia through trade and tourism’ (Nairn et al. 1996, p. 70). Ways of doing this include pre-clearance of goods and passengers, cooperative arrangements with Indonesia and Papua New Guinea to survey and monitor for diseases of concern, and targeting ‘high risk’ countries to develop quarantine awareness campaigns for travellers, travel agencies and exporters. The government accepted the Nairn Review’s recommendations on enhancing Australia’s offshore quarantine activities and has provided additional funding for such activities.

Border activities are the most visible part of the quarantine continuum and the area that has received most attention to date. The Nairn Review recommended better targeting of border activities to focus on paths of higher risk of pest and disease incursions. More than half of the additional funding for quarantine is directed towards overcoming deficiencies in border programs. Major initiatives include increased use of X-ray technology, expansion of the detector dog program for airports and international mail centres, increased use of electronic systems, improved processes for inspection of timber dunnage and packaging, increased shipping container inspections and improved wharf signage and surveillance.

3.3 Community responsibility

As previously noted, the concept of quarantine being a shared responsibility — involving the Commonwealth, States, industry and the wider community — is a central theme of the Nairn Review. The government strongly endorsed this approach in its response:

While the Commonwealth Government clearly has a leadership role, it is impossible for the Commonwealth to do it all alone. For example, people have to be responsible for what they bring back when they travel overseas, and the State Governments and industry each have an important role in developing incursion management plans, monitoring and surveying for pests and diseases, and responding to outbreaks.

(DPIE 1997, p. 12)

To bring about a change in the culture of quarantine and to engender a strong sense of community ownership, the government has provided A$5.6 million over four years for the development and implementation of a suite of public awareness campaigns. Specific awareness strategies are
being developed to target groups such as inbound tourists/travel groups, outbound travellers, ethnic groups, international mail users, foreign students studying in Australia, import industry groups, primary industry groups and school students.

### 3.4 Consultative decision-making

Lack of effective consultation by AQIS was a frequent criticism of industry groups during the Nairn Review. The Review Committee believed that effective consultation is essential if a meaningful partnership is to be developed and a sense of community ownership of quarantine is to be established. The government endorsed the Nairn Review’s recommendations for increased consultation in import risk analysis (see section 3.1) and other aspects of the operations of AQIS. The government will increase consultation with stakeholders, broaden the operation of the existing Industry Charging Review Committees to encompass consultation on policy issues, strengthen formal communication with the States, and enhance consultation with indigenous groups and remote local communities in relation to quarantine matters affecting them. The establishment of QEAC will also facilitate better consultation with stakeholders.

### 3.5 External input to quarantine policy

The government perceives a need for an independent advisory body to be established to provide regular external advice on quarantine policy to the Minister for Primary Industries and Energy and to maintain a dialogue between AQIS, industry and the community. The government has provided funding for the establishment of QEAC to fulfil this role. The terms of reference of QEAC are:

- to provide advice on major quarantine and export services policy issues and strategic directions for AQIS;
- to oversee DPIE’s implementation on the Nairn and Fish Task Force Reports;
- to provide advice on matters referred by the Minister;
- to act as a focal point to ensure broad-ranging consultation between AQIS, industry and stakeholders;
- to provide advice on the effectiveness of AQIS’s program delivery; and
- to help AQIS evaluate its performance.

(DPIE 1997, p. 18)\(^6\)

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\(^6\)These terms of reference are considerably broader than those of the former Quarantine and Inspection Advisory Council, which has been disbanded.
The Council consists of up to twelve members, appointed by the Minister according to their expertise and experience rather than on the basis of specific industry representation. In responding to the Nairn Review in August 1997, the Minister for Primary Industries and Energy announced that Professor Malcolm Nairn had agreed to serve as the first Chairman of QEAC. Following consultation with relevant stakeholders, the Minister appointed eleven additional members and the Council held its first meeting in December 1997. The Chairman of QEAC will also chair the appeal body that has been set up to examine appeals on the process of import risk analysis (see section 3.1).

3.6 Enhanced capacity in plant and fish quarantine protection and policy

The Nairn Review identified a need to enhance Australia’s capacity in both plant health and quarantine and in aquatic animal health and quarantine, but not at the expense of existing capacity in livestock health and quarantine. The government’s response acknowledged this need and provided resources to support a range of initiatives in plant and aquatic animal health and quarantine.

A major initiative is the establishment of an Office of the Chief Plant Protection Officer, to provide leadership and coordination of plant health and quarantine similar to that provided by the Office of the Chief Veterinary Officer for the livestock and aquatic animal sectors. Establishment of this office is imminent, pending finalisation of recruitment of a Chief Plant Protection Officer. A related major initiative is the establishment of an Australian Plant Health Council, to provide national coordination of Commonwealth government, State government and industry input to plant health and quarantine, similar to that provided by the Australian Animal Health Council for the livestock sector. The government has funded a unit within DPIE to liaise with the States and industry to facilitate the development of the new Council.

With respect to aquatic animal health and quarantine, a new Fish Product Policy Unit has been established in DPIE, a Fish Health Unit has been established within the Office of the Chief Veterinary Officer, and additional specialists in aquatic animal health have been appointed in AQIS. A program of risk analyses on aquatic animals and their products has commenced, in accordance with the priorities identified by the National Task Force on Imported Fish and Fish Products. RAPs are already working on import risk analyses for prawns, ornamental fish, freshwater crayfish and

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7 In addition to the twelve appointed members, the Director of Quarantine (the Secretary of DPIE) and the Executive Director of AQIS are members of QEAC.

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salmon (from New Zealand). Risk analyses on imports of molluscs, baitfish and feedfish are scheduled to commence early in 1998.

Exotic disease preparedness and contingency planning are being developed in both the aquatic animal and plant sectors. With plants, preparedness and contingency planning will be a high priority for the new Office of the Chief Plant Protection Officer. With aquatic animals, an emergency response plan is being developed along the lines of AUSVETPLAN, which has proven to be very effective with livestock disease incursions.

3.7 Delivering quarantine objectives

The Nairn Review developed a set of broad principles that should be considered in determining the most suitable structure for the quarantine service. These principles include:

- developing a new culture both within AQIS and the wider community;
- enhancing the establishment of a partnership with stakeholders;
- permitting effective, efficient and transparent development and delivery of Australia’s quarantine policies and programs;
- enabling flexible application of resources and procedures;
- providing mechanisms for the delivery of the public good elements of quarantine;
- delivering commercial objectives consistent with the goal of quarantine, government policy and community needs;
- establishing credibility and maximising accountability with stakeholders;
- forging strong links with appropriate external groups to provide expert input into the development and delivery of quarantine policies and programs;
- instilling professionalism, fairness and equity; and
- ensuring independence from undue influence from any section of the community.

(Nairn et al. 1996, pp. 35–6)

The Nairn Review considered that an independent statutory authority would best enable these principles to be met. It concluded that establishing such an entity — independent of DPIE but responsible to the Minister for Primary Industries and Energy — would serve as a catalyst for instilling a new culture for quarantine and would ensure that scientific issues regarding quarantine are addressed independently of trade considerations. In the light of overseas criticisms, the Nairn Review considered that independence and transparency of decision-making are essential for Australia’s quarantine service.

In its response, the government indicated that it considered that objectives such as community ownership of quarantine, cultural change and
more efficient use of resources, could be achieved without creating a statutory authority. Because quarantine policy is central to the government’s agricultural and trade policies, the government’s view is that ‘quarantine policy must be determined by government along with other agricultural and trade policy issues. . . . [T]his is not a matter for a statutory body to decide in isolation from other Government policy making processes’ (DPIE 1997, p. 14).

The government’s response indicated that a number of other key factors had influenced the decision to reject the recommendation for a statutory authority:

- the need to be able to demonstrate adherence by the government to Australia’s international trade and other obligations;
- AQIS’s key role in negotiating market access with foreign agencies — often in close collaboration with other areas of DPIE;
- the need for close links with other key government agencies; and
- the intention to reduce the size of government and ensure the maintenance of ministerial accountability.

(DPIE 1997, p. 14)

The government’s clearly stated view is that ‘the public interest can best be safeguarded by the Minister’s continued involvement in the broad direction of quarantine policy’ while the direct administration of AQIS remains under the direction of the Secretary of DPIE as Director of Quarantine (DPIE 1997, p. 14). AQIS will therefore continue as an operating group within DPIE but some fundamental restructuring is being undertaken, including the establishment of QEAC to provide enhanced external input to quarantine policy and establishment of a Quarantine Development Unit to review key quarantine issues. Moreover, in the government’s view, these changes — together with other changes such as increased consultation on import risk analysis — will meet the principles identified in the Nairn Review as fundamental for Australia’s quarantine agency.

The recommendations on the type of organisational structure best suited to Australia’s quarantine service were the only major recommendations that the government failed to adopt. Notwithstanding the Nairn Review’s arguments for the need for transparency in the policy-making process for quarantine, this approach may have some potential costs for Australia if it is one of the few countries that adopts that approach. The government’s refusal to ‘unbundle’ quarantine and other trade policy issues may be justified on the grounds that there is no loss of competitive position. Given the time constraints imposed on the Nairn Review, the potential competitive disadvantage of Australia adopting a more transparent policy on quarantine than other countries was not examined.
4. Conclusion

In providing significant additional funding to quarantine — at a time of overall budgetary stringency — the government has clearly indicated its commitment to maintaining a strong quarantine system. In its response to the Nairn Review, the government has stressed the importance of Australia’s quarantine system for potential exports and the need for ‘a credible quarantine policy that is consistent with international rules and standards’ (DPIE 1997, p. 8).

Overall, changes being made to Australia’s quarantine system following the Nairn Review are expected to result in greater transparency, which is consistent with Australia’s international obligations and its role as a major agricultural exporter. At the same time, the quarantine service has been strengthened and the focus of quarantine has been extended beyond the border. The government’s recognition of the need to strengthen the pre-border and post-border elements of the quarantine continuum will be important in managing the quarantine threats inherent in increasing volumes of trade and higher levels of tourism.

The government’s endorsement of the partnership approach has established a framework for a change in the culture of quarantine that recognises that quarantine is not the sole responsibility of government. All members of the community along with industry and governments need to be involved. In following the blueprint provided in the Nairn Review, the government aims to ensure better consultation and community ownership of quarantine policy. The focus on increased awareness and a partnership approach to quarantine will improve community and stakeholder understanding of quarantine issues including appreciation of both government policy and Australia’s international obligations. Although the changes to the import risk analysis process are yet to be tested, the new process — based on manageable risk underpinned by science and incorporating greater consultation — will increase stakeholder participation and ownership, and should ultimately result in less contentious outcomes.

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