The Auditor-General Audit Report No.19 2005–06 Performance Audit

Managing for Quarantine Effectiveness–Follow-up

Department of Agriculture, Fisheries and Forestry

Biosecurity Australia

Australian National Audit Office

© Commonwealth of Australia 2005

ISSN 1036-7632

ISBN 0 642 80878 3

COPYRIGHT INFORMATION

This work is copyright. Apart from any use as permitted under the *Copyright Act 1968,* no part may be reproduced by any process without prior written permission from the Commonwealth.

Requests and inquiries concerning reproduction and rights should be addressed to the Commonwealth Copyright Administration, Attorney-General's Department, Robert Garran Offices, National Circuit Canberra ACT 2600

http://www.ag.gov.au/cca



Canberra ACT 1 December 2005

Dear Mr President Dear Mr Speaker

The Australian National Audit Office has undertaken a performance audit in the Department of Agriculture, Fisheries and Forestry and in Biosecurity Australia in accordance with the authority contained in the *Auditor-General Act 1997*. I present the report of this audit and the accompanying brochure to the Parliament. The report is titled *Managing for Quarantine Effectiveness–Follow-up*.

Following its tabling in Parliament, the report will be placed on the Australian National Audit Office's Homepage—http://www.anao.gov.au.

Yours sincerely

2____

lan McPhee Auditor-General

The Honourable the President of the Senate The Honourable the Speaker of the House of Representatives Parliament House Canberra ACT

AUDITING FOR AUSTRALIA

The Auditor-General is head of the Australian National Audit Office. The ANAO assists the Auditor-General to carry out his duties under the *Auditor-General Act 1997* to undertake performance audits and financial statement audits of Commonwealth public sector bodies and to provide independent reports and advice for the Parliament, the Government and the community. The aim is to improve Commonwealth public sector administration and accountability.

For further information contact: The Publications Manager Australian National Audit Office GPO Box 707 Canberra ACT 2601

 Telephone:
 (02) 6203 7505

 Fax:
 (02) 6203 7519

 Email:
 webmaster@anao.gov.au

ANAO audit reports and information about the ANAO are available at our internet address:

http://www.anao.gov.au

Audit Team Alan Greenslade Gillian Nicoll Stephen Cull Sally Ramsey

Contents

Ab	Abbreviations	
Gl	ossary	8
Sι	Immary and Recommendations	11
Sι	immary	
	Background	13
	Audit objective	15
	Key findings and conclusion	15
	Recommendations and responses	18
Re	commendations	20
Αι	dit Findings and Conclusions	23
1.	Introduction	25
	The importance of quarantine	25
	Administration of quarantine	25
	Previous ANAO audit	28
	Review by the Joint Committee of Public Accounts and Audit	29
	This audit	29
2.	Quarantine Policy Development	32
	Introduction	32
	A single Import Risk Analysis process	33
	Conclusion	35
3.	Consultation with Industry	36
	Introduction	36
	Opportunities for industry input via the single process	37
	Engaging stakeholders in open and transparent discussions	38
	Conclusion	44
4.	Risk Analysis Research and Communication	45
	Centre of Excellence for Risk Analysis	45
	Communication of technical information	46
	Conclusion	48
5.	Administration of Import Requests	49
	Consultation with State/Territory departments	49
	Memorandum of Understanding with the Department of the Environment and	50
	Heritage	
	Managing conflicts of interest	
	Backlog of import requests	
	Conclusion	53

6.	Quarantine	e Risk Management	54	
	Introductio	n	54	
	Increased	Quarantine Intervention		
	Risk-based	d resourcing	57	
	Risk profili	ng arrangements	59	
	Conclusion	· · · · · · · · · · · · · · · · · · ·	63	
7.	Border Effe	ectiveness	65	
	Introductio	n	65	
	Effectivene	ess indicators and performance targets		
	Airports		67	
	Internation	al Mail	71	
	Import Clea	arance	74	
	Conclusion	۱	77	
8.	Quarantine	e Risks Posed by Marine Pests and Imported Cargo	79	
	Introductio	n	79	
	Ballast wat	ter	79	
	Biofouling	organisms	80	
	Container	washing facilities	81	
	Container i	inspection procedures	82	
	Conclusion	۱	83	
9.	Off-shore S	Strategies to Manage Quarantine Risks	84	
	Introductio	n	84	
	Operationa	al targets and criteria for off-shore arrangements	85	
	Managing	quarantine risks with off-shore arrangements	87	
	Conclusion	1	92	
Ap	pendices.			
An	pendix 1:	Key Findings on Previous Recommendations	95	
	pendix 2:	New and Old Import Risk Analysis Processes		
	pendix 3:	Airports-Leakage Data		
	pendix 4:	Effectiveness of Airports Intervention		
	pendix 5:	International Mail-Leakage Data		
	pendix 6:	Effectiveness of International Mail Intervention		
	pendix 7:	External Inspection of Sea Containers-Leakage Data .		
Appendix 8:		ICPMS Project		
		·		
Series Titles				
Better Practice Guides1				

Abbreviations

AFAS	Australian Fumigation Accreditation Scheme
AFMA	Australian Fisheries Management Authority
ALOP	Appropriate Level of Protection
AQIS	Australian Quarantine and Inspection Service
ANAO	Australian National Audit Office
BA	Biosecurity Australia
CATS	Canadian Accredited Timber Scheme
DAFF	Department of Agriculture, Fisheries and Forestry
JCPAA	Joint Committee of Public Accounts and Audit
ICPMS	Import Clearance Performance Management System
IQI	Increased Quarantine Intervention
IRA	Import Risk Analysis
IRAAP	Import Risk Analysis Appeals Panel
MOU	Memorandum of Understanding
NIMPCG	National Introduced Marine Pests Coordination Group
QIC	Quarantine Import Clearance
QRI	Quarantine Resourcing Indicators
SPS	Sanitary and Phytosanitary
WTO	World Trade Organisation

Glossary

Border	Geographical limits of Australia subject to the <i>Quarantine Act</i> 1908.
Breach	Goods of quarantine concern not detected at the border.
Detection	Finding goods, vectors or vessels of quarantine concern.
Effectiveness	The effectiveness indicator measures the likelihood (or probability) that seizable quarantine material will be detected by AQIS.
Entry of goods	The movement of goods across the border and into Australia.
Failure	Goods that do not meet the AQIS inspection, regulation or documentation requirements.
Intervention	The intervention indicator measures the number of items subject to some form of quarantine inspection by AQIS.
Leakage	A measure of goods of quarantine concern that have not been detected as they cross the border, or an estimate of this.
Leakage survey	A survey to estimate the leakage that passes through a process, typically done at the end-point of the process by examining a random sample of units that have been passed by the process.
Off-shore	All areas outside the border of Australia (also referred to as pre-border).
Pest	Any species, strain or biotype or organism or pathogenic agent injurious to humans, plants, plant products, animals, animal products or the environment.
Quarantine concern	Refers to items of quarantine interest that require further quarantine assessment.

Quarantine Any goods or vectors subject to the *Quarantine Act 1908*.

- Risk Risk is discussed in terms of a pest's likelihood of being introduced, established or spread within the border; and the consequences of it causing harm.
- Risk assessment Evaluating the quarantine risk associated with goods, pathways or activities, and determining the appropriate action to manage the risk.
- Risk profiles Tools to direct AQIS' attention towards items of quarantine concern, based on an analysis of past seizure data.
- SPS Agreement WTO Agreement on the *Application of Sanitary and Phytosanitary Measures.*
- Treatment Any process for controlling or eliminating a pest or disease.

Summary and Recommendations

Summary

Background

1. The primary role of quarantine is to keep unwanted pests and diseases out of Australia, while facilitating the flow of goods and people, wherever possible, across the border.

2. Quarantine is delivered through the Agriculture, Fisheries and Forestry portfolio, as follows:

• **Biosecurity Australia** (BA) is responsible for developing policy to determine which items are permitted to enter Australia, and under what conditions. New quarantine policies are developed through a process called an Import Risk Analysis (IRA). This process involves a science-based assessment of quarantine risks.

Prior to December 2004, BA was part of the Department of Agriculture, Fisheries and Forestry (DAFF). In December 2004, the Government made BA a prescribed agency under the *Financial Management and Accountability Act 1997*. This was to increase the independence of its operations and to ensure appropriate financial autonomy. The Government also considered this would further reassure stakeholders of BA's capacity to ensure that quarantine policy is always based on sound science.¹

• The Australian Quarantine and Inspection Service (AQIS), which is part of DAFF, has operational responsibility for managing quarantine risks. Its key role is to seize prohibited items arriving at the major border entry points—airports, mail centres, cargo ports or on shipping vessels. Quarantine risks are also managed through off-shore and post-border activities.

3. For simplicity, this audit refers to BA when discussing both current and former arrangements. In addition, although AQIS is part of DAFF, this audit refers to AQIS when discussing operational matters.

¹ See media release from the Hon. Warren Truss, then Minister for Agriculture, Fisheries and Forestry, DAFF04/335WT, *Government commitment to independence of Biosecurity Australia delivered*, dated 1 December 2004.

Previous audit

4. In June 2001, the Australian National Audit Office (ANAO) tabled Audit Report No.47 2000–01, *Managing for Quarantine Effectiveness*. The audit assessed the management of quarantine services, and the implementation and impact of the Government's response to the Quarantine Review Committee report.²

5. The audit concluded, *inter alia*, that there were weaknesses in the management of the quarantine function that needed to be addressed to improve both operational effectiveness and quarantine outcomes. Areas which warranted management attention included: extending risk management practices to ensure that risk treatments appropriately address quarantine risks across different modes of entry; appropriately assessing and monitoring performance; and reducing the extent to which aspects of the Import Risk Analysis process result in avoidable controversy and uncertainty.

6. The audit made eight recommendations, all agreed to by DAFF.

7. In the May 2001 Budget, following the outbreak of foot and mouth disease in Europe, the Government announced additional funding of some \$281.4 million for AQIS. This funding was to be used, *inter alia*, to substantially increase intervention and effectiveness levels at the major border entry points. The Government initiative was referred to as Increased Quarantine Intervention (IQI).

Joint Committee of Public Accounts and Audit inquiry

8. The Joint Committee of Public Accounts and Audit (JCPAA) conducted a full inquiry into the quarantine function in 2002, tabling its report, *Review of Australia's Quarantine Function*, in February 2003.

9. The JCPAA concluded that, in general, '…Australia's quarantine function is in good shape and the additional funding is being appropriately used'.³ However, the Committee made 14 recommendations to further improve aspects of the quarantine function, and requested that the ANAO conduct a follow-up audit.

² The Quarantine Review Committee, chaired by Professor Nairn, conducted an extensive review into Australia's quarantine function in 1996, making 109 recommendations for the Government to consider.

³ Joint Committee of Public Accounts and Audit Report No.394, *Review of Australia's Quarantine Function,* February 2003, Chairman's Foreword, page iii.

Audit objective

10. The objective of this audit was to assess the effectiveness of the actions taken by AQIS and BA to strengthen the administration of quarantine.

11. The audit focussed on progress in implementing the recommendations from the previous ANAO audit, and recommendations made in the JCPAA's inquiry. (The audit did not address four JCPAA recommendations that were either not supported by the Government, or were policy matters for the Government to consider. See Appendix 1.)

Key findings and conclusion

12. The ANAO's key findings are summarised below. Findings against each recommendation are set out in Appendix 1.

Quarantine policy development

13. The introduction of a new Import Risk Analysis (IRA) process in August 2003 has addressed several of the weaknesses with IRA processes identified during the previous audit. The new process provides additional opportunities for stakeholders to provide input into an IRA, and at an earlier stage in the process.

14. The ANAO found that BA's consultation processes have generally facilitated stakeholder input. However, the ANAO found that BA could improve its procedural documentation by incorporating recent enhancements to procedures for facilitating stakeholder input.

15. There is also scope to improve communication where some stakeholder suggestions are not supported by BA. For example, where agreement has not been reached with stakeholders on the efficacy of particular treatments, BA could better communicate the range of risk management strategies, including emergency measures, it proposes to use (or has available), to prevent the entry of a particular pest or disease into Australia. This may provide greater assurance to stakeholders on the rigour of BA's risk mitigation strategies.

16. The Government has established an Eminent Scientists Group to provide independent advice to the Director of Animal and Plant Quarantine on whether the draft Final IRA has adequately considered all technical submissions received from stakeholders. The ANAO considers that an earlier role for the Eminent Scientists Group for some IRAs would enable the more

timely resolution of contentious issues and reduce subsequent redrafting of the Final IRA.

17. BA has introduced additional measures to assist stakeholders to better understand the application of Australia's Appropriate Level of Protection. This has improved stakeholder understanding. However, the need for stakeholders to understand the final risk assessment remains a continuing challenge for BA, as it is a complex technical area. Nevertheless, it is at the heart of BA's role, and warrants further endeavours to improve transparency.

18. The ANAO found that the administrative arrangements to manage potential conflicts of interest for officers involved in an IRA and quarantine policy making process were generally sound.

19. The Government has provided BA with additional funding for conducting IRAs. At July 2005, 35 IRAs were in progress. A further 182 market access requests were still to be assessed by BA to determine whether they will be addressed through an IRA or by a review or extension of existing policy.

Quarantine operations

20. The IQI funding provided by the Government has been used to increase and reallocate quarantine resources, and to improve infrastructure. Around 1 200 additional full-time staff have been employed since 2001; an extra 64 x-ray machines have been installed; and 46 additional detector dog teams have been trained. There have also been major upgrades to quarantine facilities at mail centres, airports and seaports.

21. Effectiveness indicators and targets have been established under IQI. The indicators are based upon a two-tiered classification system, which separates seizures into 'higher risk' and 'risk' groupings. Those items with gravest quarantine consequences are in the 'higher risk' group, which has correspondingly higher effectiveness targets. Other material, of lower (but still significant) quarantine concern, is in the 'risk' group.

22. This approach has improved AQIS' ability to understand and treat quarantine risk. However, AQIS does not assess risk consequences beyond the two risk categories used in the indicators. This limits AQIS' ability to systematically assess the variation in the consequences of quarantine risks that can occur from the range of prohibited items arriving in Australia, which in turn limits AQIS' ability to target resources effectively.

23. However, a risk assessment tool which aims to assess, in a more systematic manner, projected consequences associated with prohibited items is well developed and is expected to be completed before the end of 2005. At that time, AQIS will consider whether to implement the model.

24. Use of risk profiling has been strengthened, to predict where items of high quarantine concern are likely to be found. However, the adequacy of profiling arrangements for the contents of sea containers cannot be assessed because AQIS does not estimate the number of prohibited items in sea containers that have crossed the border undetected. In other words, AQIS has limited means of determining whether profiles have failed to target consignments of quarantine interest.

25. Surveys are now conducted widely to identify prohibited items that should have been seized at the border, but were not. The ANAO found that the methodologies for these surveys were robust.

26. These surveys indicate that the quantity of prohibited material undetected at airports and mail centres has decreased substantially since the previous audit. At that time, almost 90 per cent of prohibited items arriving at the mail centres and more than half of prohibited items arriving at the airports were undetected. In 2004–05, this had reduced to 31 per cent for mail, and 21 per cent for airports.

27. These improvements reflect progress by AQIS in response to effectiveness targets set by the Government. All targets were met for airport passengers in 2004–05. However, higher risk targets for three of the five classes of mail items have not been met.⁴ AQIS advised that major infrastructure improvements at the Sydney and Melbourne mail centres, once completed, are expected to improve the effectiveness of AQIS' interventions.

28. The effectiveness of the external inspections of sea containers has been improving over the last four years, but performance is still slightly below target. Prohibited material is undetected because the bases of containers dispatched on some flatbed trucks are not examined at the initial AQIS inspection, due to insufficient clearance between the flatbed trucks and the container.

29. AQIS does not measure the effectiveness of its inspections on the contents of sea containers. However, using limited testing in one State, it has

⁴ Effectiveness targets for higher risk items are 96 per cent, and 50 per cent for risk items.

estimated that the number of prohibited items in sea containers entering Australia may be of the order of six to seven per cent. Such a level represents the weakest performance in quarantine effectiveness, as such rates indicate that large volumes of prohibited material are entering Australia. AQIS is developing a system to collect and report on operational effectiveness for, *inter alia*, the contents of sea containers. This should assist AQIS to strengthen risk-based targeting.

30. In terms of managing quarantine risks off-shore (that is, prior to the cargo arriving at the border), AQIS has introduced new measures to further mitigate off-shore quarantine risks. In general, these measures provide greater assurance that quarantine risks are being managed effectively. However, with respect to a new scheme for accrediting Canadian timber, some enhancements in the area of procedural documentation and analysis of inconsistent detection rates across ports are warranted.

31. AQIS has also progressed initiatives related to the management of quarantine risk posed by ballast water and biofouling organisms.

Conclusion

32. Overall, since the last audit, AQIS and BA have made substantial improvements in the administration of quarantine. In addition, AQIS and BA have made significant progress in implementing previous recommendations.

33. All but two recommendations have been implemented or partially implemented (see Appendix 1). The two other recommendations are in progress. Those parts of recommendations yet to be fully implemented are, in many cases, well advanced.

Recommendations and responses

34. Notwithstanding the progress in addressing previous recommendations, the ANAO made five new recommendations aimed at strengthening the ongoing administration of the quarantine function. All recommendations were agreed to by DAFF and Biosecurity Australia.

35. DAFF and Biosecurity Australia's full response to this audit are provided below.

Department of Agriculture, Fisheries and Forestry

The Department is supportive of the audit and agrees to the recommendations. The Department welcomes the ANAO's acknowledgement of the substantial improvements and enhancements to quarantine operations since the last audit report.

Biosecurity Australia

Biosecurity Australia is supportive of the audit report and agrees to the recommendations. Biosecurity Australia welcomes the ANAO's judgement that action on the recommendations from the original ANAO Report No.47, 2000–01 and JCPAA Report 394 is substantially complete.

Recommendations

 The ANAO recommends that Biosecurity Australia update its procedural documentation to incorporate recent enhancements to procedures addressing: (a) the period of notice to be given to stakeholders prior to the release of Import Risk Analysis documents;
(b) the purpose of workshops, and the advanced provision of agenda papers for workshops; and
(c) notification to stakeholders of methodology changes that are likely to impact on stakeholders' ability to respond effectively within timeframes.
Biosecurity Australia Response: Agreed.
The ANAO recommends that Biosecurity Australia document in Import Risk Analyses the range of strategies that will be used to manage quarantine risks associated with imported commodities, particularly where there is not agreement on the efficacy of treatments.
Biosecurity Australia Response: Agreed.
The ANAO recommends that the Department of Agriculture, Fisheries and Forestry consider amending the Terms of Reference for the Eminent Scientists Group to facilitate the Group's earlier involvement in the IRA process, as considered appropriate. <i>Department of Agriculture, Fisheries and Forestry</i> <i>Response:</i> Agreed.

RecommendationThe ANAO recommends that AQIS enhance its ability
to systematically analyse the potential consequences
associated with quarantine risk material escaping
detection, to better inform the targeting of its
resources.

Department of Agriculture, Fisheries and Forestry Response: Agreed.

RecommendationThe ANAO recommends that in relation to the
Canadian Accredited Timber Scheme, AQIS:

Para 9.26

- (a) finalise operational procedures (National Work Instruction) as soon as practicable;
- (b) strengthen the existing alert scheme to ensure instances of non-compliance are promulgated to all ports; and
- (c) investigate the reasons for inconsistent detection rates across ports.

Department of Agriculture, Fisheries and Forestry Response: Agreed.

Audit Findings and Conclusions

1. Introduction

This chapter describes the role of quarantine and how it is administered. It also sets out the objectives and methodology of the audit.

The importance of quarantine

1.1 Australia is fortunate to have an environment which, compared to other countries, is relatively free of many harmful pests and diseases of animals and plants. This favourable health and quarantine status provides a substantial economic advantage to Australia:

- the gross value of Australian agriculture production is around \$35 billion per year; and
- a clean, green status benefits Australians through protection of the natural environment and by reducing costs to the agricultural industries.

1.2 In addition, quarantine failures such as exotic pest and disease incursions can be expensive to control. For example, some \$123 million has been committed to fund the eradication of Fire Ants found in Queensland.

Administration of quarantine

1.3 As illustrated in Figure 1.1, the quarantine function is delivered through the Agriculture, Fisheries and Forestry portfolio, as follows:

• **Biosecurity Australia** (BA) is responsible for developing policy to determine which items are permitted to enter Australia and under what conditions. New quarantine policies are developed through a process called an Import Risk Analysis (IRA). This process involves a science-based assessment of quarantine risks.

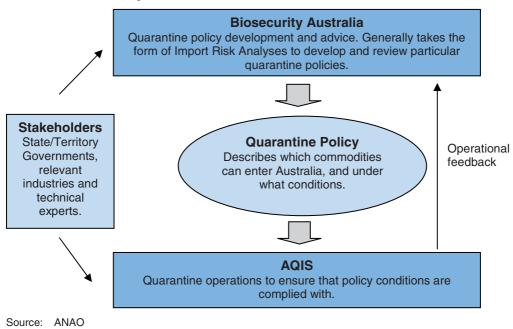
Prior to December 2004, BA was part of the Department of Agriculture, Fisheries and Forestry (DAFF). In December 2004, the Government made BA a prescribed agency under the *Financial Management and Accountability Act 1997*. This was to increase the independence of its operations and to ensure appropriate financial autonomy. The Government also considered this would further reassure stakeholders of BA's capacity to ensure that quarantine policy is always based on sound science.⁵

• The Australian Quarantine and Inspection Service (AQIS), which is part of DAFF, has operational responsibility for managing quarantine risks. Its key role is to seize prohibited items arriving at the major border entry points—airports, mail centres, cargo ports or on shipping vessels. Quarantine risks are also managed through off-shore and post-border activities.

1.4 For simplicity, this audit refers to BA when discussing both current and former arrangements. In addition, although AQIS is part of DAFF, this audit refers to AQIS when discussing operational matters.

1.5 The legislative basis for the administration of quarantine in Australia is the *Quarantine Act 1908* and its subordinate legislation, including the *Quarantine Proclamation 1998*.

Figure 1.1



Administration of quarantine

⁵ See media release from the Hon. Warren Truss, then Minister for Agriculture, Fisheries and Forestry, DAFF04/335WT, Government commitment to independence of Biosecurity Australia delivered, dated 1 December 2004.

Quarantine policy

1.6 The risks to Australia's quarantine status are managed through quarantine policy that describes which animals, plants, genetic material and other products can be brought into Australia, and under what conditions.

- **1.7** Quarantine policy is bound by two agreements:
- the World Trade Organisation's (WTO) *Agreement on Agriculture,* which prohibits the use of agriculture-specific non-tariff measures to distort trade; and
- the WTO Agreement on the *Application of Sanitary and Phytosanitary Measures* (the SPS Agreement), which prohibits the use of unjustified food safety and quarantine requirements to protect domestic producers from international competition.

1.8 Under the SPS Agreement, governments have the right to impose restrictions on international trade where it is necessary to protect human, animal or plant health from certain risks. However, in employing a protective measure, governments need to be able to demonstrate that there is scientific evidence of potential animal, plant or human health risks by:

- using internationally developed standards, guidelines and recommendations; or
- demonstrating that measures are based on a scientific assessment of the potential health risks, where standards do not exist or a government chooses not to use them.

1.9 Quarantine policy is recorded in the *Quarantine Proclamation*, which lists goods prohibited in Australia unless accompanied by permits from AQIS. Permits specify the quarantine treatments required to bring a product into Australia. Goods not accompanied by permits, or failing to have completed all quarantine treatments specified on the permit, can be re-exported or, in some cases, treated on arrival before being released from quarantine.

Quarantine operations

1.10 AQIS is responsible for managing quarantine operations including inspecting, seizing or treating goods arriving from overseas that are subject to the quarantine proclamation and import permits. Its key role is to detect and seize prohibited items at the border. Prohibited items that cross the border

undetected pose a quarantine risk to Australia. Some key quarantine statistics are illustrated in Figure 1.2.

Figure 1.2

Quarantine statistics for 2004-05

Mail		
•	Almost 144 million mail items screened.	
Airports		
•	More than 10 million air passengers and crew screened.	
•	Approximately 45 000 quarantine items seized at airports each month.	
Ports		
•	More than 1.5 million sea cargo containers inspected.	
Source: ANAO analysis of AQIS data		

1.11 AQIS and the Australian Customs Service (Customs) work together at airports, seaports and mail centres to detect and deter the unlawful movement of goods into Australia. However, AQIS and Customs have different operational responsibilities. AQIS protects Australia from exotic pests and diseases, while Customs intercepts illegal goods, such as drugs and weapons.

Previous ANAO audit

1.12 In June 2001, the ANAO tabled Audit Report No.47 2000–01, *Managing for Quarantine Effectiveness*. The audit's objective was to assess DAFF's management and impact of the Government Response to the Quarantine Review Committee report.⁶

1.13 The audit concluded, *inter alia*, that there were weaknesses in the management of the quarantine function that needed to be addressed to improve both operational effectiveness and quarantine outcomes. Areas which warranted management attention included: extending risk management practices to ensure that risk treatments appropriately address quarantine risks across different modes of entry; appropriately assessing and monitoring performance; and reducing the extent to which aspects of the Import Risk Analysis process result in avoidable controversy and uncertainty.

⁶ The Quarantine Review Committee, chaired by Professor Nairn, conducted an extensive review into Australia's quarantine function in 1996, making 109 recommendations for the Government to consider.

1.14 The audit made eight recommendations to improve the management of the quarantine function, four of which focussed on AQIS' operations and four on BA's policy development role. DAFF agreed to all eight recommendations.

Review by the Joint Committee of Public Accounts and Audit

1.15 In the May 2001 Budget, following the outbreak of foot and mouth disease in Europe, the Government announced additional funding of some \$281.4 million over four years for AQIS. This funding was to be used, *inter alia*, to increase intervention and effectiveness levels at the major border entry points.

1.16 The Joint Committee of Public Accounts and Audit (JCPAA) conducted a full inquiry into the quarantine function in 2002, tabling its report, *Review of Australia's Quarantine Function*, in February 2003. The Committee sought to reassure the Parliament that the ANAO's recommendations had been carried out, and that the additional funds allocated to the quarantine function were being well spent.

1.17 The JCPAA concluded that, in general, '…Australia's quarantine function is in good shape and the additional funding is being appropriately used'. However, the Committee made 14 recommendations to improve aspects of the quarantine function.

1.18 The Government response to the JCPAA's recommendations can be found at http://www.aph.gov.au/house/committee/jpaa/aqis/ExecMinute.htm.

1.19 The JCPAA requested that the ANAO conduct a follow-up audit to review progress against its recommendations.

This audit

Audit objective and scope

1.20 The objective of this audit was to assess the effectiveness of the actions taken by AQIS and BA to strengthen the administration of quarantine.

1.21 The audit focussed on progress in implementing the recommendations from the previous ANAO audit, and recommendations made in the JCPAA's inquiry. (The audit did not address four JCPAA recommendations that were either not supported by the Government, or were policy matters for the Government to consider. See Appendix 1.)

Audit approach and methodology

1.22 The ANAO undertook fieldwork at AQIS' central office in Canberra and at several quarantine-related facilities in New South Wales, Victoria and Queensland.

1.23 The audit methodology involved:

- a review of the major changes to the quarantine function since the previous audit, including changes to management practices;
- examination and review of agency files and documentation to assess the efficiency and effectiveness of processes and resource management;
- observation of quarantine operations (at international airports, mail centres, seaports, and cargo management sites) to assess the application of key operational controls;
- analytical reviews of selected program data to gain insights into program management; and
- interviews of key stakeholder groups to obtain a broader range of views on the management of quarantine operations.
- **1.24** The audit was completed for a cost of \$380 000.

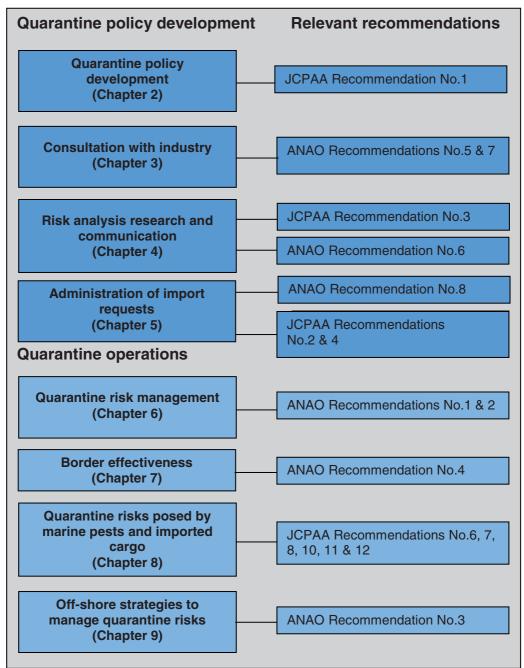
Report structure

1.25 Chapters 2, 3, 4 and 5 address the ANAO and JCPAA recommendations relevant to the development of quarantine policy—the responsibility of BA. Chapters 6, 7, 8 and 9 address the recommendations relevant to the management of quarantine operations—the responsibility of AQIS.

1.26 The structure for this report is summarised in Figure 1.3.

Figure 1.3

Report Structure



Source: ANAO

2. Quarantine Policy Development

This chapter outlines the process for developing quarantine policy, and summarises some key changes to Biosecurity Australia and the Import Risk Analysis process since the previous audit. It also addresses JCPAA Recommendation No.1.

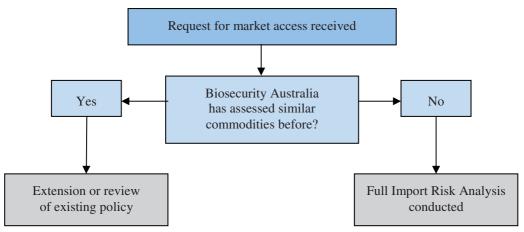
Introduction

2.1 Each year, Biosecurity Australia (BA) receives market access requests from local or overseas parties to bring commodities, such as animal and plant material, into Australia.

2.2 BA assesses the risks associated with the commodity and develops a policy for the commodity's importation. Where the quarantine risks for new commodities are assessed to be similar to the quarantine risks for commodities already permitted entry into Australia, BA will generally apply or extend⁷ existing policies and standards. However, where existing policies and standards are not applicable, the process for developing a new policy is called an Import Risk Analysis (IRA)(see Figure 2.1).

Figure 2.1

Decision path for managing market access requests



Source: ANAO

2.3 Commodities will only be permitted entry into Australia if the quarantine risks are reduced to a level consistent with Australia's Appropriate Level of Protection (ALOP). The ALOP is determined by the Australian

⁷ Making adjustments to existing policy by, for example, assessing additional pest and disease risks.

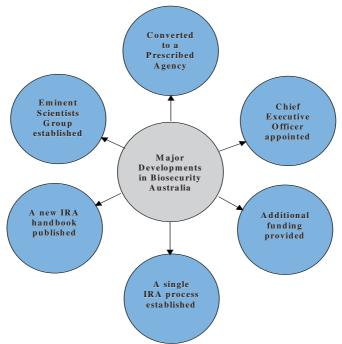
Government. It is currently expressed in IRA documents as: '...providing a high level of protection aimed at reducing [quarantine] risks to a very low level, but not to zero'.⁸

Changes to Biosecurity Australia and the IRA process

2.4 Since the previous audit, BA has undergone several significant changes (see Figure 2.2). The key change in relation to the ANAO's previous recommendations was the introduction of a single IRA process.

Figure 2.2

Key developments at Biosecurity Australia since the previous ANAO audit



Source: ANAO

A single Import Risk Analysis process

- **2.5** At the time of the previous audit, IRAs were conducted in two ways:
- **routine IRAs** were undertaken when the scientific issues were considered to be less complex or not likely to involve the analysis of

⁸ See Final Risk Analysis Report for Mangosteen Fruit from Thailand, February 2004, available from [accessed on 18 May 2005].">http://www.affa.gov.au/content/publications.cfm?ObjectID=DFFA4267-D3EA-4718-96949F08676D29D2>[accessed on 18 May 2005].

new and significant risks. These IRAs were typically conducted by BA staff; and

• **non-routine IRAs** were undertaken when new or complex risks had to be considered. These IRAs were conducted by a Risk Analysis Panel comprising BA staff, as well as external people with relevant expertise in quarantine risk analysis.

2.6 Many of the administrative limitations identified in the previous audit flowed from differences in the way that routine and non-routine processes were managed. Following a review of the IRA processes, BA introduced a single process, in August 2003, for conducting all IRAs. This change was designed, *inter alia*, to facilitate greater stakeholder involvement in the IRA process.

2.7 The single process contains many of the features of the non-routine process, providing more opportunities for stakeholders to provide input, and at an earlier stage, than the previous routine approach. The key differences between the single process and the former routine and non-routine processes are outlined in Appendix 2.

The New Import Risk Analysis Handbook

JCPAA Recommendation No.1

The Department of Agriculture, Fisheries and Forestry—Australia should:

- (a) finalise its Draft Administrative Framework for Import Risk Analysis;9 and
- *(b) update its website information to reflect the current procedures for import risk analysis.*¹⁰

2.8 The new single IRA process has been reflected in a document called the *Import Risk Analysis Handbook*. The *Handbook* sets out each step of the IRA process, and was released on DAFF's website in 2003.¹¹

2.9 The *Handbook* clearly articulates the purpose and conduct of consultation under the IRA process, and explains the procedures by which stakeholders can provide commercially sensitive information.

⁹ This document has been revised and is now referred to as the *Import Risk Analysis Handbook*.

¹⁰ Joint Committee of Public Accounts and Audit Report No.394, *Review of Australia's Quarantine Function*, February 2003, paragraph 2.48, p.15.

¹¹ Available from <http://www.daff.gov.au/content/publications.cfm?ObjectID=D667DCE6-A412-4673-A6B49B7579CF4AD7>[accessed on 16 May 2005].

Conclusion

2.10 JCPAA Recommendation No.1 has been implemented. The *Handbook* has been finalised, and released on DAFF's website.

3. Consultation with Industry

This chapter assesses whether Biosecurity Australia has addressed ANAO Recommendations No.5 and No.7 relating to stakeholder involvement in the Import Risk Analysis process.

Introduction

3.1 One of the key principles endorsed by the Government in its response to the Quarantine Review Committee report, published in 1996, was the adoption of a more consultative approach to quarantine policy development and decision-making.¹²

3.2 The Government considered that open and transparent consultation would help reduce any perception that import access decisions were being made without regard to the scientific concerns of industry or the wider community.¹³

Previous findings

3.3 The previous audit identified a range of stakeholder concerns about the management of the IRA process under the routine and non-routine approaches, as summarised below:

- in some routine IRAs, BA staff undertaking the IRA were considered to have limited direct experience of the industry under consideration;
- as the scientific issues in a routine IRA were considered more straightforward, BA often used a relatively narrow range of scientific advice, with BA scientists usually undertaking the bulk of the analysis; and
- the routine path provided fewer opportunities than the non-routine path, for stakeholders to provide input on scientific issues.

3.4 The ANAO made two recommendations aimed at strengthening industry involvement in the IRA process.

¹² Department of Primary Industry and Energy, *Australian Quarantine: A Shared Responsibility—the Government Response,* August 1997, p.12.

¹³ ibid.

ANAO Recommendation No.5

The ANAO recommends that, to improve the transparency in the treatment of science in IRAs, Biosecurity Australia consider:

- (a) encouraging early discussion and agreement on scientific issues by means such as issuing discussion papers that focus on hazard identification and risk assessment; and
- (b) arranging adequate access to experts familiar with the industry under consideration.¹⁴

ANAO Recommendation No.7

The ANAO recommends that Biosecurity Australia:

- (a) give consideration to the costs and benefits of including the consequences of pest and disease incursions in the criteria for use of the non-routine process;
- (b) ensure that the consultation process allows provision of commercially sensitive information, while remaining consistent with Australia's WTO obligations;
- (c) develop and promulgate guidelines on the purpose and conduct of consultation in the IRA process; and
- *(d)* seek stakeholder views on the major issues or considerations at the start of the *IRA*.¹⁵

Opportunities for industry input via the single process

3.5 The single IRA process (discussed in Chapter 2) provides opportunities for BA to address some of the concerns that led to parts of the ANAO's previous recommendations. In particular:

- earlier discussion of scientific issues is now facilitated through the requirement for BA to consult with stakeholders at the start of all IRAs. This includes seeking stakeholder views on the list of pests and diseases to be considered by the IRA;¹⁶
- there are now more opportunities for industry experts to be involved in the IRA process. For example, stakeholders can nominate industry

¹⁴ ANAO Audit Report No.47 2000–01, *Managing for Quarantine Effectiveness*, paragraph 7.22, p.109.

¹⁵ ibid., paragraph 7.67, p.119.

¹⁶ In the previous audit, this was referred to as hazard identification.

experts for membership of IRA teams, or stakeholders can use industry experts to provide advice on technical issues papers; and

- the consequences of pest and disease incursions are considered as part of the risk analysis process for all IRAs. The template used to develop IRAs includes a section to consider the likely consequences of pest and disease incursions.
- **3.6** The effectiveness of industry input is discussed in the next section.

Engaging stakeholders in open and transparent discussions

3.7 The ANAO examined BA's consultation processes for a sample of IRAs subject to part, or all, of the new single process, focussing on whether consultation processes were effective in:

- facilitating stakeholder input;
- managing stakeholder input (and expectations), especially where differences of opinion arose between BA and stakeholders in respect to the scientific base of IRAs; and
- allowing independent review of matters where differences of opinion were unable to be resolved through normal consultative channels or by appeal.

Facilitating stakeholder input

3.8 For IRAs undertaken under the new process, the ANAO found that the methods BA used to facilitate stakeholder involvement were generally satisfactory. These methods included:

- maintaining a list of registered stakeholders and providing these stakeholders with automatic mail-outs of relevant IRA documents;
- releasing IRA information on the DAFF website;
- issuing policy memoranda notifying stakeholders of the release of IRA documents; and
- developing internal communication strategies for IRAs. These strategies identify the key stakeholders, the main messages to communicate to stakeholders, and the best means to communicate those messages.

3.9 Stakeholders contacted by the ANAO advised that the consultation process generally works well. For most consultations undertaken, stakeholders considered that there is greater clarity about: the purpose of the consultation; stakeholders' role in the process; and the conduct of the process. Stakeholders also advised that they were aware of, and understood, the process to be followed for providing commercially sensitive information, as set out in the *Handbook*.

3.10 However, stakeholders raised two general concerns about BA's consultation practices, as summarised below:

- **clarifying the purpose of meetings and workshops**—some stakeholders advised that the purpose of meetings/workshops was not clearly articulated by BA and that, in some cases, agenda papers were not provided until the meeting. Stakeholders considered that these problems impaired their ability to provide fully considered input into the process; and
- lack of notice of the release of IRA documents on the website and through mail-outs—without advance notice some stakeholders considered that they were unable to provide a fully considered response to documents, especially when new risk assessment methodologies had been introduced by BA. This was because suitably skilled people are often not available to assist with technical matters at short notice.

3.11 BA has recognised that greater structure and rigour is required in the decision making process and, as such, advise that several improvements had been made to the management of industry communication. These include: documenting the purpose of workshops and meetings held during 2005; and informing key stakeholders of impending IRA releases.

3.12 The ANAO considers that regularising these procedures and the communication improvements in procedural documentation would assist stakeholders to ensure that they have adequate resources available to provide timely and fully considered input into the IRA process.

Recommendation No.1

3.13 The ANAO recommends that Biosecurity Australia update its procedural documentation to incorporate recent enhancements to procedures addressing:

- (a) the period of notice to be given to stakeholders prior to the release of Import Risk Analysis documents;
- (b) the purpose of workshops, and the advanced provision of agenda papers for workshops; and
- (c) notification to stakeholders of methodology changes that are likely to impact on stakeholders' ability to respond effectively within timeframes.

Biosecurity Australia response

3.14 Agreed. Procedural documentation will be updated, as appropriate, to reflect recent enhancements to procedures.

Managing stakeholder input

3.15 Under a consultative framework, transparent procedures are required for assessing, and using, stakeholder comments. This includes communicating how stakeholder views have been addressed.

3.16 This can be easier to do where BA incorporates stakeholder suggestions into the IRA process. For example, during the technical issues stage of a fruit IRA, stakeholders requested that BA consider the risk of oriental fruit fly entry on broken skin of the fruit. In response, BA included the use of the Interstate Certification Assurance 13 (unbroken skin) Scheme in the proposed risk management measures for the fruit.

3.17 There is also scope to improve communication where some stakeholder suggestions are not supported. For example, in the case of the IRA illustrated in Figure 3.1, a treatment was incorporated having regard to the balance of efficacy and trade considerations. This was not the treatment proposed by industry.

3.18 BA and AQIS had contingency measures in place to address the quarantine risks should the method of treatment not work effectively. However, they did not advise stakeholders of this, either via the IRA or through other communication channels.

Figure 3.1

A draft IRA for importation of a fruit proposed the use of an air/water blast to remove pests of quarantine concern prior to export to Australia.

This followed BA's observation of the use of the air blast on fruit in a research laboratory, and in a packing house facility, and concluded that the air blast treatment was successful in removing pests. In addition, the exporting country provided efficacy data from a laboratory-based trial which found the air/water blast to be 100 per cent effective.

Domestic stakeholder's response to the draft IRA queried the efficacy of the air/water blast treatment. They favoured the use of methyl bromide fumigation to remove these pests. In their view, the efficacy of methyl bromide fumigation was proven.

The final IRA retained the air/water blast as the required risk treatment to remove pests. Methyl bromide and insecticidal dips were identified as in-principle measures. This was because, while these treatments were assessed as equally efficacious, they were considered to be more trade restrictive.

However, in practice, the air/water blast treatment was not effective. Of the first 63 consignments of the fruit exported to Australia, AQIS inspectors found live insects on 55 consignments. Methyl bromide fumigation was applied as an emergency measure by AQIS to treat these pests.

BA placed a requirement for mandatory pre-shipment fumigation with methyl bromide on all consignments of this fruit during 2005. Alternative measures for exporting the fruit in a pest-free condition without fumigation were discussed with the exporting country.

Source: ANAO

3.19 The ANAO acknowledges that BA must make decisions, consistent with its responsibilities, on the best available information at the time. However, where there is not agreement with stakeholders on the efficacy of particular treatments, BA could better communicate the range of risk management strategies, including emergency measures, it proposes to use (or has available) to prevent the entry of a particular pest or disease into Australia. This may provide greater assurance to stakeholders on the rigour of BA's risk mitigation strategies.¹⁷

¹⁷ BA advised the ANAO that, in respect to Figure 3.1, for any new import commodity for which there are new import conditions, AQIS trains its inspectors on how to conduct the inspection based on the nature of the commodity. Initial consignments are monitored to ensure that the import conditions manage the risk.

Recommendation No.2

3.20 The ANAO recommends that Biosecurity Australia document in Import Risk Analyses the range of strategies that will be used to manage quarantine risks associated with imported commodities, particularly where there is not agreement on the efficacy of treatments.

Biosecurity Australia response

3.21 Agreed.

Building stakeholder confidence

3.22 Notwithstanding improvements in consultative processes described above, the ANAO found that aspects of the processes warrant further consideration to see if they can be improved to increase stakeholder confidence in the IRA process. These include:

- stakeholders do not receive individual responses from BA on their comments.¹⁸ Hence, stakeholders are not able to readily ascertain whether their comments have been incorporated into the IRA;
- some of BA's responses to stakeholder questions (summarised in draft and final IRAs) are considered by stakeholders to be too broad, making it difficult for them to understand why particular comments were not taken up by BA; and
- in one case, BA issued a Draft IRA for comment without advising stakeholders that the draft document had transcription errors in the quantitative model used. Although BA considered that the errors did not have a material impact on the level of assessed risk for the commodity under review, some stakeholders held a contrary view and provided input to BA in response to the incorrect data.

3.23 In response to such concerns, BA has created a new branch that has specific responsibilities for, *inter alia*, the planning, priority setting and review mechanisms required to ensure the highest quality of output for IRA documents.

3.24 The issue of whether BA should provide individual responses to stakeholders needs to be balanced against the costs and benefits of such an approach. However, given the Government's commitment to establishing a consultative framework, this issue warrants ongoing dialogue between BA and

¹⁸ All stakeholder comments are summarised in the draft and final IRAs.

stakeholders. Any decision on this matter should be communicated to stakeholders so that expectations are better managed.

Independent review of Import Risk Analyses

3.25 Under the single IRA process, there is provision for BA to seek advice from independent IRA reviewers before finalising either the draft or Final IRA report.

3.26 The use of independent external peer reviewers has been used once since the introduction of the single IRA process.¹⁹ BA advised that its limited use reflects:

- the availability of suitably qualified persons within Australia to review the work of the IRA team. Such persons tend to be on IRA teams already; and
- the potential for conflict of interest issues to arise if overseas peer reviewers are sought.

3.27 Notwithstanding these issues, BA advised that it intends to identify opportunities to make greater use of independent reviewers in the future.

3.28 The Government has also established an Eminent Scientists Group to provide independent advice to the Director of Animal and Plant Quarantine on whether the IRA has adequately considered all technical submissions received from stakeholders during the Final IRA.

3.29 At the time of the audit, the Eminent Scientists Group had not been formally involved in any IRA. However, the Terms of Reference for the Group indicate that the Group is to be involved during the latter stages of the IRA—that is, during the drafting of the Final IRA.

3.30 Where stakeholder submissions hold a view contrary to BA's position, the ANAO considers that it may be more cost-effective to seek earlier resolution of contentious issues. For instance, if the Eminent Scientists Group's view was that the IRA Team had not adequately considered all technical submissions, the matter could be dealt with, and subsequent redrafting of the Final IRA would be reduced.

3.31 This points to an earlier role for the Eminent Scientists Group, whilst having regard to practical limitations in involvement too early. BA advised

¹⁹ The United States Department of Agriculture reviewed a fruit IRA in 2004.

that it has had discussions with the chair of the Eminent Scientists Group about the most appropriate time for the Group to be involved, with a view to an earlier engagement between the Eminent Scientists Group and BA.

Recommendation No.3

3.32 The ANAO recommends that the Department of Agriculture, Fisheries and Forestry consider amending the Terms of Reference for the Eminent Scientists Group to facilitate the Group's earlier involvement in the IRA process, as considered appropriate.

Department of Agriculture, Fisheries and Forestry response

3.33 Agreed. The operation of the Eminent Scientists Group will be reviewed in the light of experience. Included in this review will be the consideration as to whether the Terms of Reference should be amended to allow earlier involvement in the IRA process.

Conclusion

3.34 ANAO Recommendations No.5 and No.7 have been implemented.

3.35 The introduction of a single IRA process has provided additional opportunities for stakeholders to provide input in the IRA process, and at an earlier stage in the process. BA is facilitating and managing stakeholder input.

3.36 Notwithstanding these developments, the ANAO found that BA could further improve its management of the IRA process, and thereby increase stakeholder confidence in its decision-making processes, by addressing:

- the period of notice to be given to stakeholders prior to the release of Import Risk Analysis documents;
- the purpose of workshops, and the advanced provision of agenda papers for workshops; and
- notifying stakeholders of methodology changes that are likely to impact on stakeholders' ability to respond effectively within timeframes.

3.37 For some IRAs, identification and resolution of different viewpoints between BA and stakeholders may require the Eminent Scientists Group to be engaged at an earlier stage in the IRA process.

4. Risk Analysis Research and Communication

This chapter discusses the establishment of a research Centre of Excellence for Risk Analysis, and the communication of the application of Australia's Appropriate Level of Protection. It addresses JCPAA Recommendation No. 3 and ANAO Recommendation No.6.

Centre of Excellence for Risk Analysis

Previous findings

4.1 In 1996, the Quarantine Review Committee recommended the establishment of a key centre for quarantine-related risk analysis to enhance Australia as a world leader in this field.

4.2 This recommendation was not accepted by the Government. However, during its inquiry in 2002, the JCPAA considered that the Government should re-visit this recommendation to help re-establish Australia's primacy in the field of risk analysis research and to reinforce Australia's credibility when quarantine issues are brought before the WTO.

JCPAA Recommendation No.3

A centre of excellence should be established to undertake risk analysis research. DAFF should review, and subsequently advise the Government, on options for the establishment of such a research centre.²⁰

4.3 The Australian Government announced in late 2004 that it would establish a Centre of Excellence for Risk Analysis to research risk analysis methodologies as a way to build on and strengthen the integrity of Australian's IRA process, and provide a service to the whole of government.

4.4 Funding of \$7.2 million over five years was provided in the 2004–05 DAFF budget for this purpose. The Bureau of Rural Sciences is responsible for ensuring that the Centre of Excellence is established.

²⁰ JCPAA Report No.394, op. cit., paragraph 2.78, p.21.

4.5 The Centre is expected to employ a minimal number of staff, but will engage contractors, drawn from a register of specialists, to provide the skills needed for individual projects.

Communication of technical information

4.6 The content of IRA reports includes the discussion of material of a technical or scientific nature. This includes the methodology used to assess risks in relation to Australia's Appropriate Level of Protection (ALOP), and the risk management measures used to reduce risk.

Previous findings

4.7 The ANAO found that some stakeholders considered that the concept of Australia's ALOP, and the process by which it is set, was not well explained by BA.

ANAO Recommendation No.6

The ANAO recommends that Biosecurity Australia consider more effective means of communicating with stakeholders the concept, definition and application of Australian's appropriate level of protection in order to facilitate stakeholder understanding of the IRA process and achieve better outcomes.²¹

Explaining and assessing Australia's ALOP

4.8 The Primary Industries Ministerial Council²² considered the definition of ALOP in May 2002. The Council agreed that the definition met Australia's needs.

4.9 To improve consistency of communication of ALOP, BA has developed a standard set of words to define ALOP, as follows:

The SPS Agreement defines the concept of an 'appropriate level of sanitary or phytosanitary protection (ALOP)' as the level of protection deemed appropriate by the WTO Member establishing a sanitary or phytosanitary measure to protect human, animal or plant life or health within its territory.

Like many other countries, Australia expresses its ALOP in qualitative terms. Australia's ALOP, which reflects community expectations through government policy, is currently expressed as providing high level of sanitary

²¹ ANAO Audit Report No.47 2000–01, op. cit., paragraph 7.37, p.113.

²² Comprised of relevant State and Australian Government Ministers.

or phytosanitary protection aimed at reducing risk to a very low level, but not to zero. $^{\rm 23}$

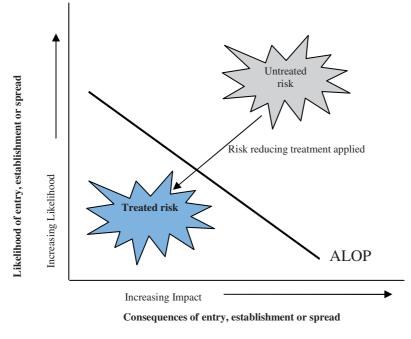
4.10 This definition is described through a risk estimation matrix. The matrix examines the likelihood and consequences of: the entry of a pest or disease into Australia; whether it will establish itself in Australia; and how far it could spread.

4.11 The standard set of words and the matrix were used in all the draft and final IRAs examined by the ANAO.

4.12 If the likelihood and consequences of a pest incursion indicates the risk associated with the entry of imported product is very low or negligible, then importation will generally be allowed. Otherwise, the commodity will not be granted entry, unless risk treatments reduce the risk into the acceptable range. This concept is illustrated in Figure 4.1.

Figure 4.1







²³ See Final Risk Analysis Report for Mangosteen Fruit from Thailand, February 2004, available from <http://www.affa.gov.au/content/publications.cfm?ObjectID=DFFA4267-D3EA-4718-96949F08676D29D2>[accessed on 17 May 2005].

4.13 Industry stakeholders interviewed by the ANAO had a range of comments regarding ALOP. There was general agreement that the standard set of words had assisted their understanding of ALOP. In addition, stakeholders commented that discussions about ALOP at workshops and other face-to-face meetings had been useful. Nevertheless, a degree of concern remains among some stakeholders that final risk assessments, including adjusting risk ratings (from 'untreated' risk to 'treated' risk) are not able to be easily understood by them.

4.14 The ANAO concluded that the more structured approach to communicating ALOP issues to stakeholders has improved stakeholder understanding. However, the need for stakeholders to understand the final risk assessment remains a continuing challenge for BA, as it is a complex technical area. Nevertheless, it is at the heart of BA's role, and warrants further attempts to improve transparency. One option may be to tailor communication strategies to particular stakeholder groups, based on their demonstrated understanding of technical issues.

Conclusion

4.15 JCPAA Recommendation No.3 is in the process of being implemented by DAFF with the intent to have the Centre of Excellence operational by the end of 2005.

4.16 ANAO Recommendation No.6 has been implemented. BA has introduced additional measures to assist stakeholders to better understand the application of Australia's ALOP. However, additional efforts are required to further clarify the final risk assessments.

5. Administration of Import Requests

This chapter addresses ANAO Recommendation No.8 and JCPAA Recommendations No.2 and No.4. It also considers the workload of import requests.

Consultation with State/Territory departments

Previous findings

5.1 The previous ANAO audit found that BA did not formally consult with State/Territory agricultural departments when prioritising IRA applications.

ANAO Recommendation No.8

*The ANAO recommended that Biosecurity Australia consult with relevant State/ Territory agencies on the priority of IRA applications.*²⁴

5.2 The *Import Risk Analysis Handbook* sets out a requirement for BA to consult with State/Territory Chief Executive Officers (and the Department of the Environment and Heritage) on the IRA Work Program and on the arrangements for new IRAs.

5.3 BA now formally meets with the Chief Executive Officers of State/Territory agricultural departments biannually, regarding the setting of priorities for IRAs.²⁵ In addition, BA consults bilaterally with state departments.

5.4 Staff from State agricultural departments contacted by the ANAO advised that the discussions on priorities are more 'for-your-information' discussions, rather than 'genuine' discussions on priorities. Feedback on comments provided to BA on States' IRA priorities does not occur.

5.5 BA does not publish a consolidated work program that takes account of stakeholder discussions. BA advised that it intends developing and publishing a work program that is inclusive of stakeholder comments. This will improve the transparency of its work priorities.

²⁴ ANAO Audit Report No.47 2000–01, op. cit., paragraph 7.82, p.122.

²⁵ These meetings are referred to as the Primary Industry Standing Committee meetings.

Memorandum of Understanding with the Department of the Environment and Heritage

JCPAA Recommendation No.2

*The Department of Agriculture, Fisheries and Forestry—Australia and Environment Australia*²⁶ *should report to the Committee on the effectiveness of the memorandum of understanding between them on quarantine matters in its response to this report.*²⁷

5.6 In response to this recommendation, the Government advised the JCPAA that:

The Memorandum of Understanding (MOU) between Biosecurity Australia and Environment Australia was agreed on 12 October 2002. The MOU established the 'Biosecurity and Environment Liaison Team' (BELT) to enhance inter-agency cooperation and consultation on Biosecurity Australia's import risk analyses and the Department of the Environment and Heritage's live import assessments. Generally, formal meetings of BELT occur on a quarterly basis and these meetings are complemented by seminars, briefings and discussion about specific IRAs and quarantine matters. The MOU has been operating satisfactorily since it was implemented.²⁸

5.7 This response addressed the JCPAA's recommendation.

Managing conflicts of interest

Previous findings

5.8 During the JCPAA's inquiry, a stakeholder provided hypothetical examples of where a conflict of interest might occur for officers involved in the IRA team and the policy-making process.

5.9 Although no actual examples were identified, the JCPAA took the opportunity to emphasise the need for transparency and accountability in the IRA decision-making process.

²⁶ The functions of Environment Australia are now undertaken by the Department of the Environment and Heritage.

²⁷ JCPAA Report No.394, op. cit., paragraph 2.78, p.21.

²⁸ Available from <http://www.aph.gov.au/house/committee/jpaa/aqis/ExecMinute.htm>[accessed on 18 February 2005].

JCPAA Recommendation No.4

Biosecurity Australia's Administrative Process for Import Risk Analysis²⁹ should contain provisions requiring individuals involved with an IRA to declare any conflict of interest.³⁰

Current arrangements for managing conflicts of interest

5.10 The *Import Risk Analysis Handbook* includes information on the management of conflicts of interest. Specifically, the *Handbook* outlines requirements for:

- a prospective IRA team member to be free of actual or perceived conflicts of interest; and
- the team member to declare that their capacity to provide advice is not compromised by conflicts of interest.

5.11 The *Handbook* outlines similar requirements for prospective members of the Import Risk Analysis Appeal Panel.

5.12 Under the single IRA process, stakeholders can appeal against any decision made by the Executive Manager of BA on the membership of IRA teams. This mechanism allows stakeholders to raise concerns, *inter alia*, about any potential conflicts of interest that may not have been disclosed by prospective team members, or otherwise uncovered by BA, during the selection of IRA team members.

5.13 The following administrative arrangements are in place to give effect to the statements in the *Handbook*:

- all members of IRA teams are required to declare any conflicts of interest before the start of each meeting, and any declarations made are recorded in the Minutes;
- SES officers are required to make specific declarations on matters that may compromise their capacity to provide independent, impartial advice;
- staff are covered by the Australian Public Service Code of Conduct, and contractors to BA are required to declare conflicts of interest; and

²⁹ This document has been revised and is now referred to as the *Import Risk Analysis Handbook*.

³⁰ JCPAA Report No.394, op. cit., paragraph 2.90, p.25.

• external contractors are required to sign a contract that includes the requirement to declare any conflict of interest to BA.

5.14 The ANAO considers that these arrangements are satisfactory in giving effect to the statements in the *Handbook*.

Backlog of import requests

Previous findings

5.15 The previous ANAO audit found that 90 per cent of IRAs exceeded target completion times set by BA, impacting on the number of new IRAs able to be started each year.

5.16 During its review, the JCPAA found that longer completion times, and the growing number of IRAs yet to be commenced by BA (estimated to be between 70-80) appeared to be causing frustration among some of Australia's trading partners.

5.17 The JCPAA recommended that the Government should provide sufficient resources to Biosecurity Australia to ensure that, within five years, the backlog in IRAs is such that new applicants can expect to wait no longer than six months, on average, before their IRA commences.³¹

5.18 In response to this recommendation, the Government advised the JCPAA that:

The formulation of biosecurity policy is a precise and resource-intensive activity in the current world climate, and the Government has already committed considerable resources for import risk analysis work, conducted in accordance with Australia's international rights and obligations. The Government is examining resource requirements with a view to reducing the import risk analysis backlog as recommended.³²

5.19 The provision of resources is a matter for BA and the Government to consider. Since the JCPAA's review, the Government has provided BA with additional funding for conducting IRAs. This included:

• \$5.5 million over two financial years (2003–04 and 2004–05), provided under the *Safeguarding Australia* initiative; and

³¹ JCPAA Report No.394, op. cit., paragraph 2.107, p.28.

³² Available from <http://www.aph.gov.au/house/committee/jpaa/aqis/ExecMinute.htm>[accessed on 18 February 2005].

• \$2.5 million per annum over four years, provided in the 2005–06 Budget.

5.20 In December 2001, the Government also established BA as a prescribed agency under the Financial Management and Accountability Act. This was to increase the independence of its operations and to ensure appropriate financial autonomy. The Government also considered this would further reassure stakeholders of BA's capacity to ensure that quarantine policy is always based on sound science.³³

5.21 Since the JCPAA's review, BA has completed five IRAs. These IRAs have each taken, on average, over four years to complete. As of July 2005, 35 IRAs were in progress. A further 182 market access requests were still to be assessed by BA to determine whether they will be addressed through an IRA or by a review or extension of existing policy.

5.22 In considering how best to address the backlog of import requests, it may be prudent for BA, as an initial step, to address stakeholder expectations by providing advice on the likely timeframes for completing IRAs. Any such advice will necessarily consider whether average completion times are expected to increase or decrease under the new IRA process (which provides additional opportunities for stakeholder consultation and external review).

Conclusion

5.23 ANAO Recommendation No.8 has been partially implemented. BA formally meets with CEOs of State/ Territory agriculture departments on the priorities for the IRA work program. However, BA has yet to publish a work program that is inclusive of stakeholder comments, which would improve the transparency of its work priorities.

5.24 JCPAA Recommendation No.2 has been implemented. DAFF and the Department of the Environment and Heritage provided the Committee with a joint response on the effectiveness of the Memorandum of Understanding between them on quarantine matters.

5.25 JCPAA Recommendation No.4 has been implemented. The revised *Handbook* outlines the procedures BA follows to manage conflicts of interest. BA's administrative arrangements for managing conflicts of interest were found to be satisfactory.

³³ See media release from the Hon. Warren Truss, then Minister for Agriculture, Fisheries and Forestry, DAFF04/335WT, *Government commitment to independence of Biosecurity Australia delivered*, dated 1 December 2004.

6. Quarantine Risk Management

This chapter discusses the impact of intervention and effectiveness targets on the allocation of resources across the quarantine function, and on profiling arrangements in the major border programs. It addresses ANAO Recommendations No.1 and No.2.

Introduction

6.1 Management of quarantine involves efficiently allocating available quarantine detection and inspection resources so as to minimise Australia's exposure to untreated quarantine risk material, a process referred to by AQIS as 'operational risk management'.

Previous findings

6.2 The previous audit estimated that almost 90 per cent of seizable material arriving at international mail centres, and more than half of all seizable material arriving at international airports, entered Australia undetected by AQIS.

6.3 That audit identified two aspects of AQIS' operational risk management arrangements that required improvement to strengthen quarantine border controls. These were:

- AQIS did not have a fully encompassing process for allocating resources across the quarantine function, based on a systematic and integrated risk management framework. This included inadequate consideration of the consequences of possible breaches; and
- the need to implement more effective risk profiling arrangements in the border programs, to direct attention towards items of quarantine concern.

6.4 The audit made two recommendations designed to strengthen AQIS' operational risk management framework.

ANAO Recommendation No.1

The ANAO recommends AQIS ensures that resource allocation, cost recovery and risk treatment decisions across all modes of entry and the quarantine continuum are based on a systematic and integrated risk management framework, including appropriate strategies to treat and manage quarantine risk. This requires both short and long term measures to provide:

- (a) information that supports comparative assessment of risk and risk treatments;
- (b) appropriate analysis of consequences in risk assessment; and
- (c) proper monitoring and review of the effectiveness of risk treatments.³⁴

ANAO Recommendation No.2

The ANAO recommends that, in order to ensure the highest risk pathways are subject to appropriate quarantine treatment, AQIS takes early action to ensure that program risk profiles are:

- (a) based on comprehensive analysis of data on the incidence of quarantine risk material;
- (b) applied effectively to all incoming goods and passengers; and
- (c) regularly reviewed to ensure they remain effective at directing effort at the border.³⁵

6.5 The ANAO has assessed AQIS' progress against these two recommendations in the context of some substantial changes to the quarantine function since the previous audit.

Increased Quarantine Intervention

6.6 Prior to the tabling of the ANAO's previous audit report, the outbreak of foot and mouth disease in the United Kingdom and Europe focussed attention on the adequacy of Australia's quarantine controls.

6.7 This outbreak highlighted the potentially devastating impact if this disease entered Australia.³⁶ In this context, the Government was aware of the

³⁴ ANAO Audit Report No.47 2000–01, op. cit., paragraph 3.29, p.61.

³⁵ ibid., paragraph 3.49, p.68.

³⁶ The Australian Bureau of Agricultural and Resource Economics estimated that an outbreak of foot and mouth disease would result in a loss of export revenue of \$5.8 billion in the first year of any outbreak.

ANAO's finding that a substantial proportion of prohibited quarantine material was crossing the border undetected.

6.8 In the May 2001 Budget, the Government set intervention and effectiveness indicators and targets for AQIS' major border programs (see Figure 6.1), and provided AQIS with \$281.4 million over four years to meet these targets. This initiative is referred to as Increased Quarantine Intervention (IQI).

6.9 The intervention indicator measures the number of items subject to some form of quarantine inspection by AQIS. The effectiveness indicator measures the likelihood (or probability) that seizable quarantine material will be detected by AQIS. The effectiveness indicators are based upon a two-tiered classification system, which separates seizures into 'higher risk' and 'risk' groupings. Those items with gravest quarantine consequences are in the 'higher risk' group, which has correspondingly higher effectiveness targets. Other material, of lower (but still significant) quarantine concern, is in the 'risk' group.

Figure 6.1

Intervention and effectiveness targets for AQIS' major border programs (per cent)

Border program	Intervention target	Effectiveness target ³⁷	
		Risk	Higher Risk
AIRPORTS	81	50	87
INTERNATIONAL MAIL	100	50	96
SEAPORTS: Passengers	100	50	87
 Vessels 	100	96*	
 IMPORTED CARGO: External surface of air containers External surface of sea containers High Volume, Low Value mail 	100	96*	

* This target applies to all prohibited items and is not categorised into 'Risk' and 'Higher Risk' items.

Source: ANAO

³⁷ The effectiveness targets apply to items prohibited from entering Australia. In some border programs, these items are classified as either 'Risk' or 'Higher Risk', depending on AQIS' assessment of the consequences to Australia if these items are not detected at the border.

6.10 AQIS' performance against the intervention and effectiveness targets set by Government is discussed in Chapter 7.

Risk-based resourcing

6.11 The implementation of IQI and the associated IQI targets largely determines the resources required to achieve required levels of intervention and effectiveness. In accordance with departmental policy, AQIS has also incorporated the management of quarantine risks into its business planning and budgeting processes.

6.12 Since the introduction of IQI in mid–2001, around 1 200 additional full-time staff have been employed; an extra 64 x-rays machines have been installed; and 46 detector dog teams have been trained. There have also been major upgrades to quarantine facilities at mail centres, airports and ports.

6.13 AQIS conducts ongoing monitoring against the IQI targets and adjusts resources to improve the effectiveness of its resource usage. In addition, within the confines of IQI, AQIS has sought to improve the efficiency of its resource usage by adopting new practices. Examples include:

- the movement of detector dog teams and x-ray machines between border programs in response to quarantine material found to be passing through the quarantine system undetected; and
- excluding the exterior surfaces of air containers remaining within the airport environs from inspection,³⁸ and redeploying the resources.

6.14 The movement of resources has been more common between border programs (or regions) than between border and pre-border activities.

6.15 Other measures AQIS has taken to strengthen its risk management framework since the last audit include developing:

- a *Glossary of Quarantine Risk Terminology*, which defines key quarantine terms; and
- a *Data Quality Plan*, which, *inter alia*, explains, for each border program, how intervention and effectiveness indicators are to be measured and calculated.

³⁸ These containers are deemed not to have crossed the border. Therefore, AQIS has determined they are not subject to normal inspection procedures.

Assessing the consequences of quarantine risk material escaping detection

6.16 The previous audit specified that operational risk management is primarily about understanding and treating varying risk between, for example, international airports and international mail, or even between individual passengers.³⁹

6.17 The effectiveness indicators described above measure the likelihood of detecting prohibited material arriving in Australia. By having two risk groups, they have also improved AQIS' ability to understand and treat quarantine risk.

6.18 However, the current approach is limited in its ability to enable AQIS to systematically assess the variation in the consequences of quarantine risks that can occur from the range of prohibited items arriving in Australia.

6.19 In response to this gap in information, AQIS has developed a model, called the Quarantine Resourcing Indicators (QRI) model, which aims to be a broad indicator of the relative quarantine risk and projected consequences associated with prohibited items seized at the border across the major pathways.⁴⁰ This will help AQIS to allocate its operational resources to achieve optimal efficiency.

6.20 The model calculates a single measure of operational risk for each item, taking into account five factors:

- **Commodity**—evaluates the inherent risk of the item being imported. For example, nursery stock has a high risk rating;
- **Country**—evaluates the risk associated with the item's country of origin. For example, products arriving from countries in Africa or from the Middle East may be rated as high risk;
- **Assurance**—evaluates risk mitigation arising from processing, certification and treatment of the item. For example, raw items have the highest risk rating;
- **Exposure**—considers the likelihood of the item coming into contact with an environment suitable for the spread of the disease or pest. For example, live plants, seeds, and live animals have a high risk rating; and

³⁹ ANAO Audit Report No.47 2000–01, op. cit., paragraph 3.1, p.54.

⁴⁰ The QRI model plays no role in quarantine policy and will not be used to set import conditions, determine entry requirements, or have any role in the Import Risk Assessment process.

• **Dispersal**—evaluates the increase in the quarantine risk because the item will be widely distributed. For example, bulk shiploads of items have an extreme risk rating.

6.21 The QRI model is currently undergoing evaluations to test its effectiveness, with early results indicating that it can provide useful insights into the nature of quarantine risks. For example, the model has shown that resources previously deployed to areas with a high likelihood of quarantine risk, may be more effectively deployed to areas where there is a lower likelihood, but higher consequences, associated with the type of items being found.

6.22 AQIS has advised that a decision on whether to implement the model will be made by the end of 2005. In the meantime, the potential consequences of quarantine material escaping detection are not subject to the degree of systematic analysis envisaged by the model, reducing the effectiveness of targeting of resources.

Recommendation No.4

6.23 The ANAO recommends that AQIS enhance its ability to systematically analyse the potential consequences associated with quarantine risk material escaping detection, to better inform the targeting of its resources.

Department of Agriculture, Fisheries and Forestry response

6.24 Agreed. AQIS will continue to develop methods of analysing the operational quarantine consequences associated with material escaping detection, as part of its integrated quarantine risk management framework.

Risk profiling arrangements

6.25 Risk profiling is a method for predicting where, from among all the items approaching Australia's border, items of higher quarantine concern are likely to be found. This is an important step in informing decisions about the allocation of defined resources.

6.26 Under IQI, the importance of risk profiling varies across the border entry points. Profiles are an essential tool for maximising border integrity in the airports and import clearance programs where AQIS selects a **subset** of items for inspection. However, in the international mail and seaports programs where **all** items are subject to inspection, AQIS has no discretion about the items to select. Hence, profiling is less important.

6.27 In the International Mail program, risk profiles are used to: raise awareness about the items of quarantine concern being sent through the mail, and to influence the type of intervention applied to particular classes of mail. For instance, more detector dog teams are now used to screen a class of mail known as Other Articles (packages less than two kilograms in weight) after it was found that some commonly seized items were being missed by x-ray.

6.28 The ANAO has assessed the adequacy of risk profiling arrangements in the programs where a subset of items are inspected—airports and import clearance programs. These are discussed below.

Airports

6.29 Targets established under IQI allow up to 19 per cent of airline passengers entering Australia to cross the border—that is, to exit the airport—without having their baggage x-rayed or inspected. This practice, known as 'overflowing', is intended to facilitate the timely processing of passengers during peak arrival periods. Overflow passengers have their Incoming Passenger Card inspected by AQIS, and may be subject to some questioning by AQIS staff. In addition, some passenger baggage may have been screened by detector dog teams.

6.30 The previous audit found that risk profiling tools were not being used at all international airports, limiting AQIS' ability to identify and target higher risk passengers. Risk profiling tools have since been developed at all international airports. The main profile identifies and ranks incoming flights according to the volume of prohibited items that passengers failed to declare from previous flights. Flights with a higher rank are subject to greater AQIS scrutiny than flights with lower ranks.

6.31 At the time of the previous audit, AQIS did not have ready access to Incoming Passenger Cards to help target higher risk passengers. AQIS now has access to all Incoming Passenger Cards. These Cards provide key information, such as flight number and occupation, on which AQIS staff base their intervention decisions. For example, a passenger from a high-risk flight, who is a first time visitor to Australia, may be directed for more intensive quarantine intervention (such as a full baggage inspection); whereas a regular business traveller from a low risk flight, who has nothing to declare, may be deemed suitable for overflow.

6.32 AQIS has strengthened the administrative arrangements supporting risk profiling. Key developments since the last audit include:

- the appointment of Risk Managers at all international airports. Risk Managers are responsible, *inter alia*, for: constructing and updating risk profiles; analysing leakage data; and, providing training to staff on the application of profiles;
- the promulgation of a *National Policy* on the Use of Profiling in International Airports, supported by a National Work Instruction on Profiling for Risk Managers; and
- the development of a national training package on risk profiling at airports.

6.33 In accordance with the National Work Instruction, airports are required to update their profiles on an annual or six-monthly basis (depending on the volume of incoming passengers). The ANAO found that the risk profiles for Melbourne and Sydney airports have been refreshed several times over recent years, in broad accordance with the work instruction. However, profiles have not been formally signed-off by Airport Managers, as also required by the work instruction.

Opportunities to strengthen border controls

6.34 As discussed further in Chapter 7, improvements in effectiveness indicate that profiling is having an impact on the amount of prohibited items entering Australia undetected. However, the ANAO identified two aspects of AQIS' risk profiling arrangements that can be improved to further reduce the risk of prohibited quarantine material crossing the border undetected.

6.35 Firstly, the ANAO found some gaps in the coverage of AQIS' profiling tools. For example, the main profiling tool does not include data on passengers who failed to declare prohibited items, but had no compliance action taken against them.⁴¹ Also, no profiling tools have been developed to target passengers that fail to declare 'inspect and release' items.⁴²

6.36 These gaps, although they have limited impact, increase the likelihood that some passengers may not be identified as higher risk, and hence may not be subject to appropriate forms of intervention. AQIS already collects, but does not actively use, much of the relevant data on which more comprehensive profiles could be based. The ANAO considers, therefore, that improvements to profiling could be achieved with minimal impact on resources.

⁴¹ Staff are not required to enter profiling details in such circumstances, although staff may elect to do so.

⁴² These items, though not prohibited, are required to be declared to AQIS and may require treatment before being released to passengers (for example, muddy hiking boots).

6.37 Secondly, the ANAO found that AQIS does not have any specific mechanisms to review whether any higher risk passengers were inappropriately overflowed.⁴³ The ANAO examined a small sample of Incoming Passenger Cards at Sydney international airport and identified one instance where a passenger was overflowed despite the airport's risk profile recommending a full baggage search for this type of passenger (because of their stated occupation).

6.38 AQIS reviews and reports the number of passengers from Avian Influenza countries that are inappropriately overflowed.⁴⁴ Extending this practice to other overflowed passengers would provide stronger assurance that risk profiles are being applied appropriately. Any staff found to be overflowing higher-risk passengers could be provided with refresher training on the correct application of profiles.

Import Clearance

6.39 Risk profiling arrangements for imported cargo are largely unchanged since the ANAO's previous audit. Tariff-based profiles remain the centrepiece of profiling activities for sea cargo. These profiles use importers' descriptions of shipments to target consignments of quarantine interest.

6.40 Tariff profiles are supplemented by other forms of profiling, namely: supplier/importer profiles; Giant African Snail profiles; broker profiles; and air cargo profiles. These profiling tools enhance AQIS' ability to identify items of quarantine interest, or, in the case of supplier and broker profiles, result in higher intervention levels being applied where failures were found in previous consignments from the same supplier or broker.

6.41 The ANAO found that, although AQIS has a process in place to update and amend its profiling tools, it has yet to develop a measure of leakage for the contents of sea containers. That is, AQIS has limited means of determining whether profiles have failed to target consignments of quarantine interest (see Figure 6.2). AQIS is addressing this weakness by developing performance measures for import clearance activities (see Chapter 7).

⁴³ That is, permitted to exit the airport without having their baggage x-rayed or inspected.

⁴⁴ These passengers are subject to a 100 per cent intervention target.

Figure 6.2

Example to illustrate limitations with risk profiles for imported cargo

AQIS cleared a consignment without inspection because the documentation identified the contents as metal furniture. However, the furniture was later found to be made of wood, not metal. When it was sold to the public, a pest was found in the furniture.

Had the documentation correctly identified the goods as wooden furniture, the consignment would have been inspected at the border, and the pest would have likely been found.

Source: ANAO

6.42 In the absence of reliable leakage measures by AQIS, objective assessment of the efficacy of profiling arrangements for imported cargo is not possible. However, AQIS has estimated leakage to be between six to seven per cent.⁴⁵

6.43 Additionally, once the Cargo Management Re-engineering project⁴⁶ is completed, AQIS will have the ability to set up and manage its own profiles, rather than relying on Customs to activate its profiles.

6.44 In the meantime, the ANAO found that AQIS has yet to address a specific finding of the previous audit. That is, AQIS has yet to conduct a major review or analysis of its tariff-based profiles to provide assurance on the efficacy of tariff-based profiles.⁴⁷

Conclusion

6.45 ANAO Recommendation No.1 has been partially implemented. AQIS' resource decisions are guided, primarily, by the requirement to meet the intervention and effectiveness targets set by Government. Within the confines of these targets, AQIS has re-allocated resources across operations to achieve more efficient or effective quarantine outcomes. These targets have regard to two categories of risk consequences.

6.46 However, the current approach is limited in its ability to enable AQIS to systematically assess the variation in the consequences of quarantine risks

⁴⁵ This estimate was based on limited testing in one State.

⁴⁶ This project, which is being managed by Customs, involves changes to the way businesses report the movement of goods across Australia's border. The CMR project includes the introduction of a new IT system and new legislation.

⁴⁷ However, AQIS has added a 'downgradable' question to address the problem found in the previous audit, with freshwater crayfish not being flagged for action by AQIS.

that can occur from the range of prohibited items arriving in Australia. However, a risk assessment tool that enhances AQIS' ability to systematically assess the consequences of prohibited items breaching the border is well developed. It is expected to be completed before the end of 2005.

6.47 ANAO Recommendation No.2 is also partially implemented. One hundred per cent of incoming mail items and vessels (including disembarking passengers) are subject to screening or inspection at the border, reducing the need for sophisticated risk profiling arrangements in these programs. Adequate profiling arrangements have been established at airports, although some minor improvements are possible. However, the efficacy of profiling arrangements for imported cargo cannot be objectively assessed until AQIS develops a measure of leakage across the relevant border activities.

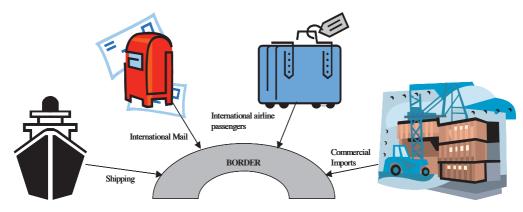
7. Border Effectiveness

This chapter examines AQIS' effectiveness indicators for its border operations, and examines AQIS' performance against these indicators. It addresses ANAO Recommendation No.4.

Introduction

7.1 The border is the main focus point of the quarantine continuum. This is where AQIS places most of its quarantine effort. These operations are aligned with the key modes of entry for quarantine risk material. (See Figure 7.1.)

Figure 7.1



Key modes of entry for quarantine risk material

Source: ANAO

7.2 Managing border operations requires performance measures to provide managers and stakeholders with accurate and timely information on the effectiveness of quarantine operations.

Previous findings

7.3 The previous audit found that AQIS assessed the effectiveness of its border operations in two key ways: (i) using volume measures of quarantine outputs, such as counts of interceptions and seizures; and (ii) assessing the rate at which prohibited items 'leak' into Australia.

7.4 However, the ANAO found that the volume measures and leakage rates did not, of themselves, give an adequate indication of the effectiveness of AQIS in its key task of intercepting and seizing prohibited items at the border.

This was because changes in the measures could be due to changes in the extent to which: seizable material approaches the border; changes in effectiveness of detection of that material; or both. Furthermore, low leakage rates could still result in large volumes of prohibited items entering Australia.

7.5 The audit estimated that a significant proportion of prohibited quarantine risk items were crossing into Australia undetected.

ANAO Recommendation No.4

The ANAO recommends that, in order to effectively support management decision making and reporting to Parliament and other stakeholders, AQIS establish more appropriate and useful effectiveness indicators for each border program (and for important elements within each program) which should:

- (a) address the likelihood of detecting seizable material arriving in Australia through measures such as the 'seizure rate';
- *(b) address the risk consequence of quarantine items escaping detection; and*
- (c) *include appropriate performance targets.*⁴⁸

Effectiveness indicators and performance targets

7.6 Since the previous audit, AQIS has developed, for the four border programs—Airports, International Mail, Seaports and Import Clearance—effectiveness indicators that measure the likelihood of detecting seizable material arriving in Australia. The Airports and Mail programs measure their effectiveness in respect of 'risk' and 'higher risk' quarantine material.

7.7 As discussed previously, the Government's IQI performance targets have set the level of effectiveness AQIS is expected to achieve to meet the Government's acceptable level of risk.

Effectiveness measurement

7.8 There are four steps used by AQIS when measuring effectiveness. AQIS:

(a) counts items that are seized at the border;

⁴⁸ ANAO Audit Report No.47 2000–01, op. cit., paragraph 5.51, p.94.

- (b) conducts leakage surveys, to identify items that should have been seized at the border, but were not;⁴⁹
- (c) estimates the volume of prohibited items approaching the border, that is, the volume of seizures and leakages; and
- (d) estimates effectiveness, that is, the proportion of quarantine material approaching the border that was actually seized.

7.9 AQIS has introduced a detailed system to: (i) collect the underlying statistics used in the compilation of the effectiveness indicators; and (ii) to calculate the indicators.

7.10 The ANAO examined these systems, and found them to be generally robust. Regional AQIS staff observed by the ANAO, across programs and states, followed operating procedures appropriately when collecting the underlying statistics, and entered the information into the system correctly.

7.11 A small number of items, such as passenger numbers and seized items, were manually entered into the effectiveness indicator system incorrectly. These errors had little impact on the published indicators. However, given the importance of the effectiveness indicators in monitoring performance at the border, AQIS should review its procedures for assuring the integrity of the data contributing to the indicators.

7.12 The ANAO examined AQIS' effectiveness indicators, and achievement against performance targets, in three border programs—Airports, International Mail and Import Clearance.

Airports

7.13 AQIS is responsible for managing the quarantine risks at Australia's international airports.⁵⁰ Passengers can exit an airport through the red channel (for those passengers with either customs or quarantine items to declare) or the green channel, and can be subject to varying levels of scrutiny in each case. For example, some passengers will have their bags examined at a quarantine bench, others will have their bags x-rayed, and others will be subject to questioning only.

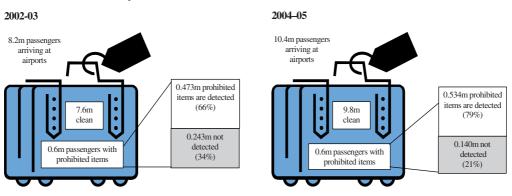
⁴⁹ Leakage surveys are typically conducted at the end-point of a quarantine inspection process, and involve a further investigation of a random sample of units that have passed through the process and are about to be released.

⁵⁰ The eight major international airports are: Sydney, Melbourne, Adelaide, Perth, Darwin, Cairns, Brisbane and Coolangatta.

7.14 In 2004–05, some 10 million passengers arrived of which: 25 per cent were subject to AQIS intervention at the benches in the red channel; 14 per cent at the x-rays in the red channel; 51 per cent at x-rays in the green channel; and 10 per cent were not subject to any intervention (known as 'overflow').

7.15 At the time of the previous audit, more than half of prohibited items arriving at the airports crossed the border undetected. By 2004–05, the proportion of undetected prohibited items had reduced to 21 per cent. (See Figure 7.2.) Performance improvements at the airports are discussed more fully in the next two sections.

Figure 7.2



Intervention at airports

Source: ANAO analysis of AQIS data

Note: Total number of items sum to more than the number of passengers, as some passengers bring in more than one prohibited item.

Leakage surveys

7.16 The last audit found there were limitations in leakage surveys being conducted. For example, leakage surveys were conducted on passengers leaving the airport through the green channel only.

7.17 The methodology and conduct of leakage surveys is now sound. AQIS conducts leakage surveys that sample passengers across all channels and at all international airports; and samples sizes in the channels are proportional to the population. (See Appendix 3.)

7.18 The surveys indicate that the proportion of passengers exiting the border with undetected prohibited material—that is, the leakage rate—reduced by approximately half between 2003–04 and 2004–05, across all channels. For example, less than 0.2 per cent of passengers exiting the red

benches in 2004–05 had undetected higher risk prohibited material, compared to 0.5 per cent in 2003–04. (See Appendix 3.)

7.19 The quantity of leakage has reduced by 42 per cent between 2002–03 and 2004–05 (from 0.243 million items to 0.140 million items). (See Appendix 3.)

7.20 AQIS advised that the improved results at airports are a combination of three factors:

- greater analysis of quarantine data that has allowed improved targeting of passengers at the border;
- the completion of infrastructure improvements at airports, especially in Sydney; and
- the impact of its campaigns to raise awareness of quarantine issues.

7.21 The ANAO identified opportunities for AQIS to obtain more information about sources of leakage, to better inform its decision making about targeting of quarantine effort. This could be achieved by making minor changes to its survey methods. For example, leakage information is not captured below the channel level, making it difficult for AQIS to further analyse where the leakage is occurring. For example, 14 per cent of 2004–05 red bench passengers were subject to questioning only, but there is no information on the proportion of red bench leakage attributed to this group.

7.22 Collection of leakage information below the channel level, from time to time, would enable AQIS to determine if there is scope for improvement in the intervention of passengers **within** channels.

7.23 The ANAO also found that AQIS does not measure the efficacy of baggage inspections in its leakage surveys:

- passengers who undergo 100 per cent physical baggage examination are excluded from the survey; and
- baggage physically examined during a partial baggage inspection is not re-examined.

7.24 The decision not to re-examine baggage is not based on the expected risk to quarantine, but on the delay to passengers. However, this does mean there is no check on the efficacy of baggage inspections. A re-examination, from time to time, of such baggage, on a sample basis, would provide evidence to support AQIS' decision to exclude this baggage from the leakage survey.

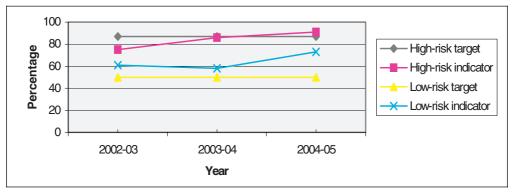
Performance against IQI targets

7.25 The Airports program compiles monthly effectiveness indicators for the airport as a whole, rather than for individual channels within the airport. These indicators are based on a three-month rolling average. Although these measures are appropriate for AQIS to monitor ongoing operations, they may still be subject to some seasonal fluctuation. For this reason, the ANAO compiled financial year effectiveness indicators.

7.26 AQIS has a target of 50 per cent effectiveness for detecting risk items, and 87 per cent for detecting higher risk items at the airport. AQIS has steadily improved its performance against its higher risk targets during the last three years, exceeding the target in 2004–05. It has exceeded its risk target in each of the last three years. (See Figure 7.3.) Appendix 4 provides more information.

Figure 7.3





Source: ANAO analysis of AQIS data

7.27 AQIS' measure of effectiveness is affected by the way the seizures and leaked items are counted. A passenger's prohibited items are classified to commodity codes, and the final number of items recorded relate to the number of codes applicable. For example, a seizure of a peach and banana is recorded as two items, as they are classified to two commodity codes. Eight wooden ornaments are recorded as one item, as they are classified to one commodity code.⁵¹

7.28 Using the current method, everything else being equal, effectiveness can change if the commodity classification used becomes finer or broader. For

⁵¹ The same practice also occurs in the mail and seaports programs.

example, if the eight wooden ornaments were able to be classified to one of four commodity codes (determined by the type of wood used), then the number of **recorded** seizures would increase, even though the actual number of wooden ornaments remains the same.

7.29 The ANAO estimated the effectiveness for Sydney International Airport, for the three months ending January 2005, using a measure based on the volume of items, rather than the number of commodity codes.⁵² It found that higher risk effectiveness reduced from 91 per cent to 86 per cent, and risk effectiveness increased from 71 per cent to 75 per cent.

7.30 The ANAO understands the inherent complexity of determining how best to measure effectiveness. In determining the best measurement strategy, AQIS has to make judgements about the overall quarantine risk presented by different **types** of items, and by the **volume** of those items. For example, two different commodities, such as a peach and a banana, may be considered to present a higher quarantine risk than a large quantity of one commodity.

7.31 AQIS should consider which measurement strategy best reflects AQIS' performance in detecting prohibited items. The current strategy, based on types of commodities, is likely to result in a different measure of effectiveness than one that is based on volume.

7.32 If AQIS decides to use a volume measure, it has the data to do so. However, the data in this field are inconsistently recorded. For example, a bag of 10 apples may be recorded as a single item, or as 10 items.

7.33 The final decision on the appropriate measurement strategy should be documented for staff to improve consistency of recording, and the soundness of the effectiveness indicators.

7.34 The ANAO also found that AQIS was only 50 per cent effective at detecting undeclared items, irrespective of whether passengers were processed in the red or green channel. AQIS advised that, if a passenger is deliberately concealing goods, it will be just as difficult to detect those goods in the red channel as in the green channel.

International Mail

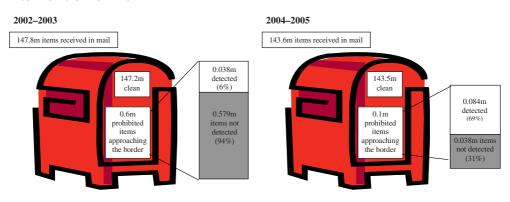
7.35 AQIS is responsible for screening all items of international mail received at seven international mail centres. In 2004–05, approximately

⁵² Seizures and leakages based on weight were counted as one item, unless there was information advising the contrary.

144 million items of mail were sent to Australia, 87 per cent of which was letter class mail.

7.36 There have been substantial improvements in the performance of the International Mail program since the last audit. At that time, 90 per cent of prohibited items arriving at the mail centres were undetected, compared to 31 per cent in 2004–05. (See Figure 7.4.) Performance improvements at the mail centres are discussed more fully in the next two sections.

Figure 7.4



Intervention of mail

Source: ANAO analysis of AQIS data

Leakage surveys

7.37 The International Mail program calculates separate effectiveness indicators for each class of mail. Therefore, it is important to obtain an adequate sample size for each class. The ANAO found that the sample for letter class mail is very large -4.95 million items in 2004–05. (See Appendix 5.)

7.38 As the leakage rate for letter class mail reduced to negligible amounts in 2004–05, AQIS could investigate the cost-effectiveness of continuing to sample such a high number of letters.

7.39 The leakage rate, that is, the proportion of mail items that have cleared the border with undetected seizable material, has decreased by 93 per cent since 2002–03, from 0.359 per cent in 2002–03 to 0.026 per cent in 2004–05. (See Appendix 5.)

7.40 The number of items estimated to be 'leaking' has also reduced by 93 per cent over the same time period (from 578 500 to 38 055). (See Appendix 5.)

These improvements are due to a greater use of detector dogs, and more x-ray screening of mail, especially for parcels and the Other Articles class of mail.⁵³

7.41 Some 66 per cent of leakage in 2004–05 occurred in the Other Articles class of mail. AQIS has recognised this problem, and has conducted a trial in the Melbourne Mail Centre, to investigate the benefits of using more quarantine dogs to detect quarantine matter in Other Articles. As a result of the trial, four additional dog teams will be allocated to Other Articles. This change, together with improvements to mail centre infrastructure,⁵⁴ is expected to reduce the leakage in Other Articles even further.

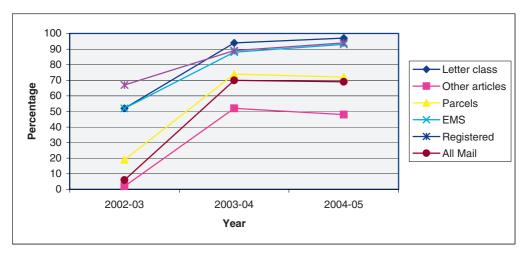
Performance against IQI targets

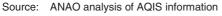
7.42 The International Mail program calculates monthly, three monthly, six monthly, and annual effectiveness indicators for each mail class. AQIS has a target of 50 per cent effectiveness for detecting risk items, and 96 per cent for detecting higher risk items.

7.43 Figure 7.5 graphs AQIS' effectiveness in detecting all risk items in each mail class since 2002–03. In the last two years, AQIS has exceeded its effectiveness target for 'risk' items in all classes of mail, except Other Articles. Appendix 6 provides more detail.

Figure 7.5

Effectiveness in detecting all risk items, International Mail program, 2002–03 to 2004–05





⁵³ Packages less than two kilograms in weight.

⁵⁴ Such as additional conveyor belts for detector dogs to run-over mail.

7.44 However, the program's effectiveness was below its higher risk target of 96 per cent in three of the five mail classes. The lowest performance was in Other Articles—49 per cent effectiveness; and parcels—74 per cent effectiveness.

7.45 Australia Post has undertaken major infrastructure improvements at the mail centres since the previous audit, and these have contributed to the improvements in effectiveness to date. AQIS advised that upgrades at the Sydney and Melbourne Mail centres, once completed, are expected to improve the effectiveness of AQIS' interventions.

Import Clearance

7.46 IQI activities cover three separate areas in the Import Clearance Program: the exteriors of all aircraft containers entering Australia are inspected for soil and other contamination; high volume low value air cargo is screened for goods of quarantine interest; and the exteriors of all sea containers entering Australia are inspected for soil and other contamination. (See Figure 7.6.)

Figure 7.6



External inspection of a sea container

Source: ANAO

Leakage surveys

7.47 The ANAO examined the leakage surveys conducted by AQIS to reinspect the outside of sea containers. The sample for this leakage survey is 100 per cent of sea containers being transported to a rural destination. Approximately 2 500 containers are selected for the survey each quarter. (See Appendix 7.)

7.48 The containers sent to metropolitan areas are not subject to leakage surveys. However, they have similar characteristics to those sent to rural areas. For example, rural containers will be from various countries around the world, so will be subject to the same level of cleanliness as metropolitan containers. Therefore, the leakage rates calculated for the rural sample should be applicable to all containers (metropolitan and rural).

7.49 AQIS has made significant progress in reducing leakage on the outside of sea containers. The leakage rate has decreased from almost 8.7 per cent in June 2003 to 2.3 per cent in June 2005. (See Appendix 7.)

7.50 The bases of containers dispatched on flatbed trucks are not examined at the initial AQIS inspection when there is insufficient clearance between the truck and the container. During the leakage survey, the containers are lifted and the cleanliness of the base determined. AQIS advised that any dirt found at the re-inspection is classified as leakage, despite it being impossible to measure at the initial inspection. However, the ANAO found that States did not consistently record it as leakage, as staff considered any dirt found was not a result of a lack of effectiveness.

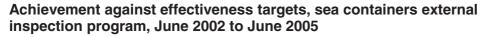
7.51 The ANAO considers that AQIS could improve the accuracy of the leakage survey results by ensuring staff are aware of, and comply with, the correct recording procedures.

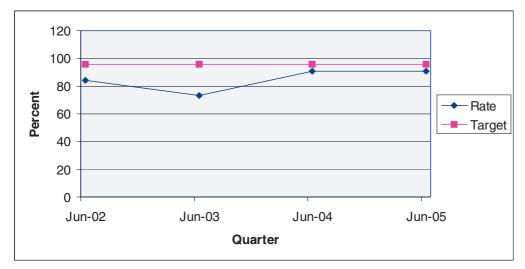
Performance against IQI targets

7.52 The quarantine risk measures in Import Clearance are focussed on the external surfaces of air and sea containers.

7.53 The external inspections of sea container are conducted at each of the ports across Australia. The effectiveness of these inspections has been improving over the last four years, although performance is still slightly below the effectiveness target of 96 per cent. (See Figure 7.7.) This is related to the difficulty AQIS has inspecting the underneath of containers loaded onto flatbed trucks.

Figure 7.7





Source: ANAO

7.54 No IQI targets were set for the internal contents of sea containers in 2001. Since then, AQIS has not set its own targets. Nor has it measured the effectiveness of its inspections on the contents of sea containers, or on the materials used to pack the contents. AQIS estimates that 12 per cent of sea containers are subject to internal inspection because the contents, or packaging, are deemed to be a quarantine risk. These containers are identified through the profiling discussed in Chapter 6.

7.55 The remaining 88 per cent of sea containers are not subject to internal inspection.⁵⁵ AQIS does not select a random sample of these containers to validate that the contents and packaging entered into the relevant computer systems are described appropriately, and are, as expected by AQIS, free of quarantine risk. For example, if a consignment of goods has had a fumigation treatment applied, and AQIS officers have sighted the treatment certificate, the goods are not inspected to ensure that the fumigation effectively eliminated the quarantine risk.⁵⁶

⁵⁵ Some of these containers may be unpacked at a Quarantine Approved Premise and, as such, may be subject to general surveillance for pest and disease.

⁵⁶ The consignment may have been subject to further inspection if it was selected for supplier and importer profiling—these consignments are included in the 12 per cent of sea cargo subject to further inspection.

7.56 To enable effectiveness to be measured for all import clearance activities, AQIS commenced a project in December 2003 called the Import Clearance Performance Management System (ICPMS). The ICPMS project is developing a system to collect and report on operational effectiveness for all import clearance activities.⁵⁷ The system is to be implemented by September 2006. (See Appendix 8 for more details about the project.)

7.57 The ANAO considers that the ICPMS project, once fully implemented, has the potential to provide AQIS with the information necessary to measure leakage of prohibited items. This information, together with seizure data, can then be used to measure the effectiveness of all import clearance activities, thus addressing a significant gap that has existed since prior to the IQI initiative. Industry representatives advised the ANAO that they are supportive of the project.

7.58 AQIS has estimated that the number of prohibited items in sea containers may be in the order of six to seven per cent. This reinforces the importance of completing this project to provide risk-based targeting of quarantine effort in this area. This is the area that has the weakest performance in quarantine effectiveness.

Conclusion

7.59 ANAO Recommendation No.4 has been partially implemented.

7.60 Since the previous audit, AQIS has improved the collection and analysis of relevant data used to assess the effectiveness of its border programs.

7.61 All border programs have effectiveness indicators that measure the likelihood of detecting seizable material arriving in Australia, although the Import Clearance program's indicators do not measure the effectiveness of all its activities.

7.62 The method of calculating the effectiveness indicators explicitly estimates the total number of seizable quarantine items approaching the border, including those not detected by AQIS. The latter are measured through leakage surveys.

⁵⁷ The Import Clearance program was restructured during 2004 to ensure that a single position was responsible for each discrete activity. ICPMS will link directly to each of these discrete activities. There are four activity streams (inspections; treatments; cargo risk management; and entry management) and 32 activities.

7.63 There are now performance targets for effectiveness indicators. These targets were set as part of the Government's IQI initiative.

7.64 The ICPMS project, once fully implemented, has the potential to provide AQIS with the information necessary to measure the effectiveness for all import clearance activities, thus addressing a significant gap.

7.65 The risk consequences of quarantine items escaping detection was discussed in Chapter 6.

8. Quarantine Risks Posed by Marine Pests and Imported Cargo

This chapter addresses JCPAA Recommendations No. 6, 7, 8, 10, 11 and 12.

Introduction

8.1 During its review of Australia's quarantine function, the JCPAA made four recommendations related to the management of quarantine risks posed by ballast water⁵⁸ and biofouling organisms,⁵⁹ and two recommendations concerning the management of quarantine risks associated with imported cargo.

8.2 The Government's full response to each recommendation can be found at http://www.aph.gov.au/house/committee/jpaa/aqis/ExecMinute.htm. The ANAO's findings on whether the JCPAA's recommendations have been addressed by DAFF are provided below.

Ballast water

JCPAA Recommendation No.6

The Department of Agriculture, Fisheries and Forestry—Australia should report to the Committee on progress with the single ballast water regime and provide a timetable for its introduction in Australia.⁶⁰

8.3 The Government provided the JCPAA with a progress report on the single ballast water regime in a formal response to the Committee in February 2004.

8.4 Since then, the single ballast water regime has been progressed by the National Introduced Marine Pest Coordination Group (NIMPCG), as part of the National System for the Prevention and Management of Marine Pest Incursions. In April 2005, an Intergovernmental Agreement was signed by

⁵⁸ Ballast water is (sea) water carried in the hull of a vessel to aid stability when the vessel is at sea.

⁵⁹ Biofouling is the accumulation of micro-organisms, plants and animals on artificial surfaces, such as ship's hulls.

⁶⁰ JCPAA Report No.394, op. cit, paragraph 3.79, p.48.

several parties.⁶¹ The Agreement commits signatories to work together to develop detailed implementation arrangements for the National System, including the ballast water management framework, legislative provisions and funding arrangements.

8.5 In the meantime, NIMPCG has established project teams to progress components of the ballast water regime, and has drawn up an implementation timetable for each component.

8.6 All components of the National System for the Prevention and Management of Marine Pest Incursions, including the ballast water regime, are expected to be completed by October 2006.

Biofouling organisms

JCPAA Recommendation No.8

The Northern Australia Quarantine Strategy should include activities to address the risks posed by organisms biofouling international recreational vessels and foreign vessels apprehended by the Commonwealth. The Government should provide additional resources to the Northern Australia Quarantine Strategy to enable it to undertake this additional role.⁶²

JCPAA Recommendation No.7

*Section 78A of the Quarantine Act 1908 should be amended so as to make reference to biofouling organisms.*⁶³

JCPAA Recommendation No.10

The Department of Agriculture, Fisheries and Forestry—Australia, the Australian Fisheries Management Authority, and Environment Australia, (in consultation with State and Territory counterparts) should identify areas and introduce procedures whereby vessels posing a quarantine risk can be routinely, expeditiously, and safely disposed of.⁶⁴

⁶¹ As of July 2005, the Agreement had been signed by: the Australian Government; the State Governments of Victoria and Tasmania; and, the Northern Territory Government. Other State governments were still to sign the agreement.

⁶² JCPAA Report No.394, op. cit., paragraph 3.102, p.52.

⁶³ ibid., paragraph 3.101, p.52.

⁶⁴ ibid., paragraph 3.103, p.52.

8.7 Since the JCPAA's review, NIMPCG has developed a *National Border Biofouling Protocol for Apprehended and Internationally Plying Small Vessels*. Once operational, the *Protocol* will require certain vessels to report to AQIS, upon arrival in their first Australia port, on the condition of the vessel's hull and on the steps taken to prevent biofouling. Vessels will then be subject to an initial risk assessment by AQIS at designated inspection sites. Any vessels found to have a prescribed level of fouling will be directed to undertake measures to reduce the risk of marine pest incursions. This may include ordering treatments such as slipping and cleaning.

8.8 AQIS is in the process of operationalising the *Protocol*. This includes making arrangements to amend the Quarantine Act to include a reference to biofouling organisms. AQIS advised that the legislative changes are anticipated to be enacted by January 2006.

8.9 NIMPCG proposes to phase-in the *Protocol* with a period of voluntary compliance, before mandatory reporting commences. AQIS advised that mandatory reporting is due to commence not before 1 October 2006.

8.10 The NIMPCG *Protocol* does not include explicit procedures on the disposal of vessels posing a quarantine risk. However, the Australian Fisheries Management Authority (AFMA) is in the process of identifying suitable sea dumping sites for apprehended foreign fishing vessels deemed to pose a quarantine risk. The intention is for proposed sites to be pre-approved by the Department of the Environment and Heritage, rather than agencies being required to go through the process of applying for a sea dumping permit.

8.11 In the meantime, vessels posing a quarantine risk are—except in cases where a sea dumping permit has been issued by the Department of the Environment and Heritage—disposed of on land by AFMA, in accordance with AQIS' internal protocols. These protocols require AFMA to mitigate the quarantine risks before the vessel is permitted to be brought ashore. AQIS officers supervise the destruction of vessels.

Container washing facilities

Previous findings

8.12 During the JCPAA inquiry, an industry stakeholder advised the Committee that it cost more, and took considerably longer, to have a container washed at the Port of Melbourne than in Sydney.

JCPAA Recommendation No.11

The Department of Agriculture, Fisheries and Forestry – Australia should facilitate the provision of sufficient additional container washing facilities in the Port of Melbourne to ensure there is competitive pressure on charges, and that the timeliness of container washing is improved.⁶⁵

8.13 Since the JCPAA's review, two additional container washing facilities have been established at the Port of Melbourne, making a total of four washing facilities. These facilities are operated by three service providers from the transport/cargo handling industry.

8.14 Key industry stakeholders advised the ANAO that waiting times have improved and charges have become more competitive since the JCPAA's review in 2002–03. Further, AQIS advised the ANAO that it has received no complaints from industry over the past 12 months regarding turnaround times for containers sent for a wash at the Port of Melbourne.

Container inspection procedures

JCPAA Recommendation No.12

The Department of Agriculture, Fisheries and Forestry—*Australia should develop standards and benchmarks for the external and internal inspections of containers which reflect the risk assessment for the container and its cargo.*⁶⁶

8.15 The ANAO verified that AQIS has introduced the range of measures described in the Government response to the JCPAA in February 2004.

8.16 AQIS has developed a National Work Instruction, which is a set of documented operational procedures, to support the External Inspection Container Regime. The National Work Instruction defines the level and type of contamination to be identified, and provides photographic examples of contamination levels.⁶⁷ Similar information, including photographic examples of contamination levels, is provided on AQIS' Internet site, providing stakeholders with the ability to assess AQIS' inspection practices against the defined standards.

⁶⁵ JCPAA Report No.394, op. cit., paragraph 3.121, p.56.

⁶⁶ ibid., paragraph 3.123, p.56.

⁶⁷ AQIS' effectiveness against these standards was discussed in Chapter 7.

8.17 Since the JCPAA's review, AQIS has conducted several reviews to assess whether inspection practices are being carried out in accordance with the *National Work Instruction on the External Inspection Container Regime*. The reviews have identified several areas for improvement, notably the inconsistent recording of inspection results for containers on flatbed trays,⁶⁸ as well as differences in the interpretation of contamination levels between States.

8.18 In response to these reviews, AQIS has: provided additional training to staff; improved supervisory arrangements over contracted staff; and, revised the National Work Instruction.

8.19 The inside of empty sea containers is inspected by approved providers, under the terms of the Empty Container Scheme (a co-regulation scheme between AQIS and industry). Inspections are required to be carried out against an inspection checklist. The checklist describes the types of quarantine risk material to be identified, and specifies the actions to be taken when such material is found. AQIS monitors compliance with inspection standards (and other matters) through a range of audit mechanisms, including unannounced audits.

8.20 All fully loaded sea containers are required to provide AQIS with a cleanliness declaration attesting to the absence of quarantine risk material. The veracity of these declarations is monitored by AQIS through a random check of import brokers' paperwork.

8.21 AQIS' processes for inspecting the internal contents of sea containers is discussed in Chapter 7.

Conclusion

8.22 JCPAA Recommendations No.6, 8, 10, 11 and 12 have been implemented.

8.23 JCPAA Recommendation No.7 has yet to be implemented, although the Quarantine Act is expected to be amended by January 2006.

⁶⁸ Containers on flatbed trays sit directly on a flat surface, impairing AQIS' ability to inspect the underside of the container. This is discussed in Chapter 7.

9. Off-shore Strategies to Manage Quarantine Risks

This chapter examines AQIS' use of off-shore strategies to manage the quarantine risks associated with imported cargo. It addresses ANAO Recommendation No.3.

Introduction

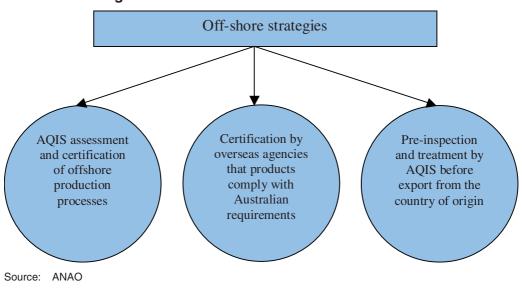
9.1 Managing quarantine risks off-shore, prior to the cargo arriving at the border, can reduce the threat of pests and diseases entering Australia.⁶⁹ In addition, dealing with risks off-shore reduces the likelihood that the cargo will fail quarantine on its arrival and have to be re-exported.

9.2 AQIS' key off-shore strategies for managing quarantine risks associated with imported cargo are illustrated in Figure 9.1.

9.3 All cargo subject to an off-shore strategy still undergoes formal quarantine clearance on arrival at the border in Australia.

Figure 9.1

Off-shore strategies



⁶⁹ AQIS uses the term 'pre-border' to refer to a range of activities that take place off-shore, before cargo is exported to Australia. The terms 'pre-border' and 'off-shore' are used interchangeably in this report.

Previous findings

9.4 AQIS lacked clear targets and planning to enable stakeholders to assess whether Government directions were being appropriately implemented and if AQIS was making optimal use of off-shore quarantine strategies.

9.5 In addition, the ANAO found that some fumigation certificates provided by overseas fumigation providers were not reliable. That is, quarantine pests were found in consignments accompanied by a fumigation certificate.

ANAO Recommendation No.3

The ANAO recommended that, in order to ensure appropriate management of quarantine risk off-shore, AQIS strengthen its management of pre-border cargo activities by:

- (a) clearly articulating government policy directions in operational targets and criteria to guide the use of pre-border arrangements; and
- (b) where pre-border strategies (such as certification) are found to be unreliable, AQIS act promptly to ensure quarantine risk is effectively managed.⁷⁰

Operational targets and criteria for off-shore arrangements

9.6 AQIS has made a number of improvements to its management of off-shore arrangements since the last audit. It has developed a document *Pre-border Cargo Quarantine Arrangements*,⁷¹ which provides guidance on the principles for the development of new off-shore arrangements and descriptions of the framework supporting existing off-shore arrangements.

9.7 The ANAO found that AQIS has taken opportunities to increase off-shore arrangements since the previous audit. For example:

• the number of new off-shore arrangements for fruit and vegetables has increased by five;

⁷⁰ ANAO Audit Report No.47 2000–01, op. cit., paragraph 4.27, p.74.

⁷¹ AQIS, Pre-border Cargo Quarantine Arrangements (February 2003), available from <http://www.daff.gov.au/content/output.cfm?ObjectID=4C4727C2-44970-46D4-A1D3ED073760799B>[accessed 9 June 2005].

- a timber accreditation scheme has been introduced covering 22 Canadian timber mills; and
- a bulk fertilisation scheme has been introduced, covering most fertiliser imported to Australia.

Criteria for developing off-shore arrangements

9.8 The *Pre-border Cargo Quarantine Arrangements* document identifies the criteria against which AQIS will accept and evaluate a submission for a new off-shore arrangement.

9.9 The ANAO found these criteria provided well-articulated guidance for external stakeholders to identify the information required to prepare and submit a proposal for a new scheme. For example, when submitting proposals, the criteria to be addressed include:

- industry demand for the scheme;
- administrative load on AQIS, industry participants, overseas government agencies and other participating parties;
- costs associated with development, implementation and management of the scheme; and
- benefits to industry and AQIS.

9.10 In addition, the document provides a template to be completed for a new proposal that identifies the information required by AQIS, a questionnaire that will assist the applicant to determine the risk associated with the project, and the evaluation method AQIS will use to assess the application.

Targets for off-shore arrangements

9.11 Targets express quantifiable performance levels or changes of level to be attained at a future date.

9.12 AQIS' *Pre-Border Cargo Quarantine Arrangements* document states that off-shore arrangements will be undertaken 'as opportunities arise and resources permit'. This is consistent with AQIS' response to the previous audit. However, the document also states that operational targets are included in the document. The ANAO found that this is not the case.

9.13 AQIS advised that specific operational targets have not been set as achievement against targets is sensitive to volatility in the trade environment. In addition, AQIS advised that it requires the flexibility to enable it to continue

to increase off-shore arrangements when opportunities arise, regardless of any target set.

9.14 The setting of targets for performance measures provides a means of assessing whether appropriate progress is being made. The setting of targets could recognise the volatility in the trade environment, and possible opportunities, but still provide a better framework for assessing progress in this important area, consistent with good program management.

9.15 The ANAO considers that the previous audit's recommendation still has merit with regard to operational targets, and AQIS should re-consider its implementation, as previously agreed.

Managing quarantine risks with off-shore arrangements

9.16 The ANAO has assessed the adequacy of AQIS' arrangements to manage the quarantine risks under each of the three off-shore strategies shown in Figure 9.1. These activities are undertaken on a cost-recovery basis.

9.17 Particular attention was paid to the actions taken by AQIS to promptly address any off-shore activities found to be unreliable.

AQIS assessment and certification of off-shore production processes

Canadian Accredited Timber Scheme

9.18 Under the Canadian Accredited Timber Scheme (CATS), if a Canadian mill exports five consecutive green sawn timber shipments without quarantine breaches, their next shipments are subject to a reduced inspection regime.

9.19 The ANAO found that, comparing the inspection rate at May 2005 with that at January 2004:⁷²

- one mill had its inspection rate increased due to a breach in quarantine requirements;
- four mills had their inspection rate reduced; and
- 16 mills remained on the same inspection rate. In these instances, seven mills had insufficient consignments to alter their inspection regime.

9.20 This Scheme is consistent with the goal of managing quarantine risk off-shore. However, given the high number of participants with insufficient

⁷² Excludes one mill that joined the CATS scheme after January 2004.

consignments to alter their inspection regimes, the impact of the scheme is inconclusive at this stage.

9.21 When a breach has occurred, in addition to a high inspection rate, AQIS provides feedback on deficiencies, including photographs, to enable the mill to improve its quality assurance processes.

9.22 The ANAO found that some timber from the same mill, arriving on the same ship, and of the same species, failed at different rates across ports. Some differences might be caused by, for example, each consignment being harvested from different trees, or different consignments including different grades of timber. These factors are not recorded on AQIS' records. In the latter case, different grades may be subject to different infestation rates.

9.23 However, it is also possible that there is some inconsistency between ports in the quality of the applied inspection process. Different versions of operational procedures were being used at each port, contributing to the possibility of variation. As well, AQIS' alert system to ensure instances of timber non-compliance found in one port are promulgated to other ports is not backed up by an assurance mechanism that alerts have been acted upon. Until these matters are addressed, AQIS will not have sufficient assurance that AQIS is conducting inspections of Canadian green sawn timber consistently.

9.24 In response, AQIS advised that a draft National Work Instruction (operational procedures) for timber inspections has been developed and will be disseminated to all offices. This draft will be finalised after the completion of the Coniferous Timber Import Risk Assessment and the National Timber Quarantine Project, expected to take twelve months.

9.25 The ANAO considers that reviews of detection rates across ports would give better assurance that the reasons for inconsistencies are valid, and that the risk of a potential incursion is being addressed. Strengthening the existing alert system to ensure instances of non-compliance are promulgated to all ports would assist in this area.

Recommendation No.5

9.26 The ANAO recommends that in relation to the Canadian Accredited Timber Scheme, AQIS:

- (a) finalise operational procedures (National Work Instruction) as soon as practicable;
- (b) strengthen the existing alert scheme to ensure instances of non-compliance are promulgated to all ports; and
- (c) investigate the reasons for inconsistent detection rates across ports.

Department of Agriculture, Fisheries and Forestry response

9.27 Agreed. Detection rates of quarantine pests on sawn timber are dependant upon a number of complex factors including the nature and habits of the pests, the operational environment and the specific type of timber.

9.28 The Canadian Accredited Timber Scheme plays a significant role in the AQIS timber inspection system. In response to the specific recommendations made by the ANAO, AQIS has:

- (a) distributed an interim work instruction to all AQIS regional offices in June 2005, with a final National procedure to be finalised by 30 June 2006;
- (b) established procedures to alert timber inspection staff at all ports to instances of non-compliance with CATS timber; and
- (c) as part of ongoing operations, AQIS will conduct a review of inconsistencies in detection rates. AQIS believes implementation of a national work instruction and enhanced alert systems will also assist in improving consistency.

Certification by overseas entities that products comply with Australian requirements

9.29 AQIS accepts certification from various overseas authorities, generally government agencies, that specific disease and contaminant tests, pest inspections and treatments have been conducted in accordance with Australia's quarantine requirements.

9.30 The previous audit found that AQIS accepted overseas certification for fumigation treatment of goods, without confidence in the integrity of the

certificates provided by the fumigators. Goods that had been certified as treated, especially in Indonesia, were found to be a quarantine risk on arrival in Australia.

9.31 Since then, AQIS has introduced a new scheme, the Australian Fumigation Accreditation Scheme (AFAS) for fumigators using methyl bromide.⁷³ At this stage, AFAS is only applicable to Indonesian fumigators, but AQIS is to extend it to other countries identified as having a higher rate of fumigation failure. For example, India, Malaysia and Thailand are scheduled to be included in AFAS by the end of 2005.

9.32 To accredit a fumigator under AFAS, AQIS undertakes a number of activities:

- it conducts an on-site assessment of the overseas treatment facility and operational procedures;
- it assesses the company's documented treatment procedures, including the handling, transport and storage of goods (before and after treatment); and
- it verifies the first five consignments on arrival at the border.

9.33 To confirm the fumigator continues to meet its obligations under AFAS, AQIS conducts inspections to monitor the integrity of consignments, such as: conducting a rural tailgate; inspecting import brokers' paperwork; or observing the unpacking of consignments at quarantine approved premises. If certificates are found to be unacceptable, further certificates from that fumigator will not be accepted.⁷⁴

9.34 The ANAO reviewed a case of an Indonesian fumigator where the integrity of its certification caused AQIS to suspend the accreditation. In this case, a member of the public had made AQIS aware of a pest found in an item of furniture.

9.35 The goods were treated, and the remaining part of the consignment still with the retailer was recalled and treated.

⁷³ Fumigation of timber packing materials, dunnage and specific commodities with methyl bromide is considered by AQIS to be an effective treatment for a number of quarantine concerns.

⁷⁴ Fumigators may be reaccredited on agreement between AQIS and the Agricultural Quarantine Agency of Indonesia.

9.36 Once the pest had been identified as exotic, AQIS notified the Indonesian authorities of the failure and the subsequent suspension. The suspension occurred three months after the goods arrived in Australia.

9.37 The delay between finding the pest and determining the type and source of the pest exposes the border to quarantine risk because certificates from that fumigator are accepted without confirming their integrity in response to this delay.

9.38 AQIS introduced an alert listing in May 2005, for all incidents where there is a potential failed fumigation. In these cases, the fumigator is identified as 'under investigation' while information about the incident is being gathered. Consignments treated by these fumigators require inspection on arrival in Australia.

9.39 The ANAO considers that the new measures introduced by AQIS provide greater assurance that the quarantine risks arising from the acceptance of fumigation certificates are being managed more effectively. However, as illustrated by the example in Figure 6.2, the adequacy of AQIS' controls relies on the contents of imported cargo being correctly described, so that goods are subject to the appropriate quarantine attention at the border.

Pre-inspection and treatment by AQIS before export from the country of origin

9.40 The importation of used machinery, such as large earth-moving equipment, poses significant quarantine risks to Australia.

9.41 The off-shore inspection of used machinery has been introduced to minimise quarantine intervention at the border, and reduce the risk that the used machinery will be re-exported back to its country of origin. In addition, to minimising the quarantine risks off-shore, this arrangement helps to minimise the costs to industry.

9.42 Under the scheme, importers of used machinery have the option to have items inspected off-shore prior to export to Australia. All items of used machinery are subject to further inspection at the border. No pre-inspected machinery/equipment has had to be re-exported since the previous audit, indicating that the scheme is effective at minimising the quarantine risks.

Conclusion

9.43 AQIS has yet to fully implement all parts of ANAO Recommendation No.3.

9.44 Criteria have been developed to evaluate proposed off-shore activities. However, AQIS has yet to set targets to assess the progress being made in its off-shore activities.

9.45 AQIS has introduced new measures to further mitigate off-shore quarantine risks. In general, these measures provide greater assurance that quarantine risks are being managed effectively. However, some administrative improvements are required to better enable the benefits of these schemes to be realised.

20

Ian McPhee Auditor-General

Canberra ACT 1 December 2005

Appendices

Appendix 1: Key Findings on Previous Recommendations

Progress in implementing previous ANAO and JCPAA recommendations

Previous recommendation	Status of previous recommendation and key findings
ANAO Recon	nmendations
 ANAO Recommendation No.1 The ANAO recommends the Department of Agriculture, Fisheries and Forestry—Australia ensures that resource allocation, cost recovery and risk treatment decisions across all modes of entry and the quarantine continuum are based on a systematic and integrated risk management framework, including appropriate strategies to treat and manage quarantine risk. This requires both short and long term measures to provide: (a) information that supports comparative assessment of risk and risk treatments; (b) appropriate analysis of consequences in risk assessment; and (c) proper monitoring and review of the effectiveness of risk treatments. 	Partially implementedAQIS resource allocation decisions are guided, primarily, by the requirement to meet the intervention and effectiveness targets set by the Government.Within the confines of these targets, AQIS
 ANAO Recommendation No.2 The ANAO recommends that, in order to ensure the highest risk pathways are subject to appropriate quarantine treatment, the Department of Agriculture, Fisheries and Forestry—Australia takes early action to ensure that program risk profiles are: (a) based on comprehensive analysis of data on the incidence of quarantine risk material; (b) applied effectively to all incoming goods and passengers; and (c) regularly reviewed to ensure they remain effective at directing effort at the border. 	Partially implemented One hundred per cent of incoming mail items and vessels (including disembarking passengers) are subject to screening or inspection at the border, reducing the need for sophisticated risk profiling arrangements in these programs. Risk profiles have been developed for all international airports. AQIS is now able to target higher risk passengers through access to passengers' Incoming Passenger Cards. The efficacy of risk profiles for imported cargo cannot be assessed until AQIS implements better systems to capture data on items of quarantine concern that should have been detected at the border, but were not.

Previous recommendation	Status of previous recommendation and key findings
 ANAO Recommendation No.3 The ANAO recommends that, in order to ensure appropriate management of quarantine risk off-shore, the Department of Agriculture, Fisheries and Forestry—Australia strengthen its management of pre-border cargo activities by: (a) clearly articulating government policy directions in operational targets and criteria to guide the use of pre-border arrangements; and (b) where pre-border strategies (such as certification) are found to be unreliable, DAFF act promptly to ensure quarantine risk is effectively managed. 	Partially implemented AQIS has established criteria against which to evaluate proposals for pre-border activities. However, AQIS has not developed targets to guide its expansion of pre-border activities. The management of pre-border strategies, especially fumigation certificates, has been improved through additional measures, such as the introduction of a new accreditation scheme. However, administrative improvements are required to maximise the benefits from a timber accreditation scheme.
 ANAO Recommendation No.4 The ANAO recommends that, in order to effectively support management decision making and reporting to Parliament and other stakeholders, the Department of Agriculture, Fisheries and Forestry—Australia establish more appropriate and useful effectiveness indicators for each border program (and for important elements within each program) which should: (a) address the likelihood of detecting seizable material arriving in Australia through measures such as the 'seizure rate'; (b) address the risk consequence of quarantine items escaping detection; and (c) include appropriate performance targets. 	Partially implemented All border programs have effectiveness indicators that measure the likelihood of detecting seizable material arriving in Australia. However, in the Import Clearance Program, indicators do not measure the effectiveness of all activities. The method of calculating the effectiveness indicators explicitly estimates the total number of seizable quarantine items approaching the border, including those not detected by AQIS. The latter are measured through leakage surveys. There are now performance targets for effectiveness indicators. These targets were set as part of the Government's IQI initiative. However, as per ANAO Recommendation No.1, AQIS has yet to fully address the risk consequences of quarantine items escaping detection, although a project to do this is well advanced.

Previous recommendation	Status of previous recommendation and key findings
ANAO Recommendation No.5	Implemented
 The ANAO recommends that, to improve the transparency in the treatment of science in IRAs, the Department of Agriculture, Fisheries and Forestry—Australia consider: (a) encouraging early discussion and agreement of scientific issues by means such as issuing discussion papers that focus on hazard identification and risk assessment; and (b) arranging adequate access to experts familiar with the industry under consideration. 	additional opportunities for stakeholders, including industry experts, to provide input into the IRA, and at an earlier stage than under the previous 'routine' approach. BA is facilitating and managing stakeholder input. <u>Further improvements</u> The ANAO identified opportunities for BA to: improve the way it facilitates stakeholder
ANAO Recommendation No.6	Implemented
The ANAO recommends that the Department of Agriculture, Fisheries and Forestry— Australia consider more effective means of communicating with stakeholders the concept, definition and application of Australia's appropriate level of protection in order to facilitate stakeholder understanding of the IRA process and achieve better outcomes.	assist stakeholders to better understand the application of Australia's Appropriate Level of Protection.
ANAO Recommendation No.7	Implemented
 The ANAO recommends that the Department of Agriculture, Fisheries and Forestry— Australia: (a) give consideration to the costs and benefits of including the consequences of pest and disease incursions in the criteria for use of the non-routine process; 	As per ANAO Recommendation No.5, the introduction of a new IRA process has addressed parts (a) and (d) of this recommendation. Parts (b) and (c) have been substantially addressed through revisions to the <i>Import</i> <i>Risk Analysis Handbook</i> .
 (b) ensure that the consultation process allows provision of commercially sensitive information, while remaining consistent with Australia's WTO obligations; 	
 (c) develop and promulgate guidelines on the purpose and conduct of consultation in the IRA process; and 	
(d) seek stakeholder views on the major issues or considerations at the start of the IRA.	

Previous recommendation	Status of previous recommendation and key findings
ANAO Recommendation No.8	Partially implemented
The ANAO recommends that the Department of Agriculture, Fisheries and Forestry— Australia consult with relevant State/Territory agencies on the priority of IRA applications.	BA formally meets with CEO's of State/ Territory agriculture departments on the priorities for the IRA work program. However, BA has not yet developed a process to assure these stakeholders that their views have been adequately considered.

Previous recommendation	Status of previous recommendation and key findings
JCPAA Reco	mmendations
 JCPAA Recommendation No.1 The Department of Agriculture, Fisheries and Forestry—Australia should: (a) finalise its Draft Administrative Framework for Import Risk Analysis; and (b) update its website information to reflect the current procedures for import risk analysis. 	Implemented The Draft Administrative Framework for Risk Analysis was re-issued in August 2003 as the <i>Import Risk Analysis Handbook</i> . The <i>Handbook</i> has been finalised and placed on DAFF's website, making it accessible to stakeholders.
JCPAA Recommendation No.2 The Department of Agriculture, Fisheries and Forestry—Australia and Environment Australia should report to the Committee on the effectiveness of the memorandum of understanding between them on quarantine matters in its response to this report.	Implemented DAFF and the Department of the Environment and Heritage ⁷⁵ have provided the JCPAA with a joint response on the effectiveness of the Memorandum of Understanding.
JCPAA Recommendation No.3 A centre of excellence should be established to undertake risk analysis research. The Department of Agriculture, Fisheries and	In progress The Australian Government announced, in late 2004, that it would establish a Centre of Excellence for Risk Analysis. Some
Forestry—Australia should review, and subsequently advise the Government, on options for the establishment of such a research centre.	\$7.9 million over five years was provided in the 2004–05 DAFF Budget for this purpose. The Bureau of Rural Sciences is responsible for ensuring that the Centre of Excellence is established.
JCPAA Recommendation No.4	Implemented
The Department of Agriculture, Fisheries and Forestry—Australia's Administrative Process for Import Risk Analysis should contain provisions requiring individuals involved with an IRA to declare any conflict of interest.	The revised <i>Import Risk Analysis Handbook</i> outlines the procedures BA follows to manage conflicts of interest. BA's administrative arrangements for managing conflicts of interest were found to be satisfactory.
JCPAA Recommendation No.6	Implemented
The Department of Agriculture, Fisheries and Forestry—Australia should report to the Committee on progress with the single ballast water regime and provide a timetable for its introduction in Australia.	DAFF provided an update on the single ballast water regime in its written response to the JCPAA.

⁷⁵ Some of the functions of the Department were previously undertaken by Environment Australia.

Previous recommendation	Status of previous recommendation and key findings
JCPAA Recommendation No.7 Section 78A of the <i>Quarantine Act 1908</i> should be amended so as to make reference to biofouling organisms.	In progress The Quarantine Act is expected to be amended by January 2006. This is in advance of the introduction of mandatory reporting requirements for vessels posing a biofouling risk.
JCPAA Recommendation No.8 The Northern Australia Quarantine Strategy should include activities to address the risks posed by organisms bio-fouling international recreational vessels and foreign vessels apprehended by the Commonwealth. The Government should provide additional resources to the Northern Australia Quarantine Strategy to enable it to undertake this additional role.	Implemented The National Introduced Marine Pests Coordination Group has been established to develop, and introduce, a National Protocol to manage, <i>inter alia</i> , the biofouling risks posed by vessels. The provision of additional resources is a matter for Government to consider, and has not been followed up by the ANAO.
JCPAA Recommendation No.10	Implemented
The Department of Agriculture, Fisheries and Forestry—Australia, the Australian Fisheries Management Authority, and Environment Australia, (in consultation with State and Territory counterparts) should identify areas and introduce procedures whereby vessels posing a quarantine risk can be routinely, expeditiously, and safely disposed of.	The Australian Fisheries Management Authority (AFMA) is identifying suitable deep- sea disposal sites for apprehended foreign fishing vessels deemed to pose a quarantine risk. In the meantime, vessels posing a quarantine risk are generally disposed of on land by AFMA, in accordance with AQIS' protocols.
JCPAA Recommendation No.11	Implemented
The Department of Agriculture, Fisheries and Forestry—Australia should facilitate the provision of sufficient additional container washing facilities in the port of Melbourne to ensure there is competitive pressure on charges, and that the timeliness of container washing is improved.	Two additional container washing facilities have been established at the port of Melbourne. Key industry stakeholders advised the ANAO that waiting times have improved and charges have become more competitive.
JCPAA Recommendation No.12	Implemented
The Department of Agriculture, Fisheries and Forestry—Australia should develop standards and benchmarks for the external and internal inspections of containers that reflect the risk assessment for the container and its cargo.	AQIS has developed detailed work instructions to support the External Container Inspection Regime. Empty sea containers are inspected by approved providers, against an inspection checklist developed by AQIS. The internal inspection of containers is guided by profiling rules that target consignments of quarantine concern. All fully loaded sea containers are required to provide a Cleanliness Certificate attesting to the absence of quarantine material.

Other JCPAA recommendations

The JCPAA made four other recommendations. These recommendations were either not supported by the Government, or were policy matters for the Government to consider. These recommendations have not been followed up by the ANAO.

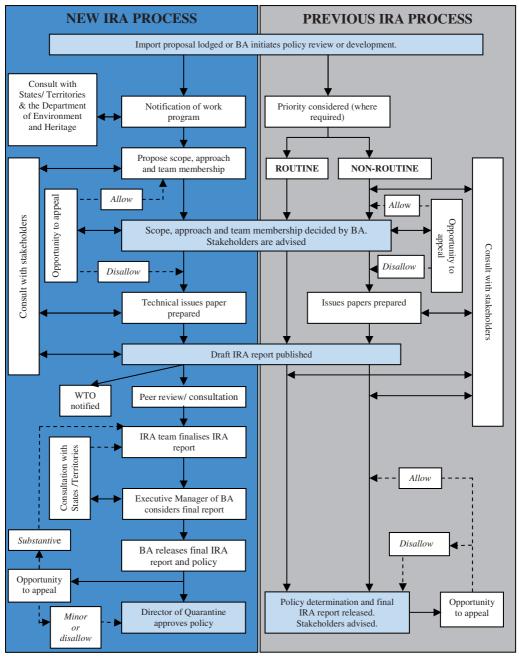
The table below lists these recommendations and the Government's response.

JCPAA recommendation	Government response
Recommendation No.5 ⁷⁶ The Government should provide sufficient resources to Biosecurity Australia to ensure that within five years the backlog in IRAs is such that new applicants can expect to wait no longer than six months on average before their IRA commences.	The formulation of biosecurity policy is a precise and resource-intensive activity in the current world climate, and the Government has already committed considerable resources for import risk analysis work, conducted in accordance with Australia's international rights and obligations. The Government is examining resource requirements with a view to reducing the import risk analysis backlog as recommended.
 Recommendation No.9 Section 185B of the <i>Customs Act 1901</i> should be amended so it: (a) includes the need to consult the Australian Quarantine and Inspection Service if a ship is considered by Customs to pose a quarantine risk; and (b) specifies that ships posing an identified quarantine risk are dealt with in an appropriate manner and timeframe (to be specified in the Act). 	The Government considers that, in conjunction with the existing provisions of the <i>Quarantine Act 1908</i> , Section 185B of the <i>Customs Act 1901</i> contains sufficient powers to manage quarantine risks and that further legislative amendment is not required. Section 185B of the <i>Customs Act 1901</i> was amended in 1999 to provide increased powers to manage quarantine risks posed by ships. Identified procedures and memorandums of understanding with relevant agencies support these legislative provisions ensuring consultation.

⁷⁶ Paragraphs 5.15-5.22 of this report address the workload of import requests.

JCPAA recommendation	Government response
Recommendation No.13 The Government should provide additional funds to the Commonwealth Scientific and Industrial Research Organisation to enable its Centre for Research on Introduced Marine Pests to provide diagnostic advice to assist the Northern Australia Quarantine Strategy to monitor bio-fouling organisms.	Funding principles for the National System for the Prevention and Management of Marine Pest Incursions have been agreed by the Natural Resource Management Ministerial Council (refer to the response to Recommendation 6). Under these principles research and development activities will be funded from a variety of sources. This will recognise that funding shares for the National System should reflect as closely as practicable the public and private benefit derived from managing marine pest incursions and the services provided in implementing it, with joint industry and government funding where appropriate.
Recommendation No.14	The Government considers the present
When quarantine measures are announced for the importation of a particular commodity, the Department of Agriculture, Fisheries and Forestry—Australia should specify how these measures relate to Australia's appropriate level of protection.	arrangements appropriate including the way risk management measures and ALOP are treated and reported in import risk analyses.

Appendix 2: New and Old Import Risk Analysis Processes



Source: ANAO

Appendix 3: Airports–Leakage Data

Channel	Leakage surve	ey sample size	sengers ^a	
Channel	Number Percentage ^b		Number	Percentage ^b
Red Bench	12,698	27	2,276,590	23
Red X-ray	6,648	14	1,446,796	15
Green X-ray	23,524	50	5,152,808	52
Overflow	3,878	8	1,002,727	10
Total	46,748	100	9,878,921	100

Airports leakage survey sample size, 2004–05

Source: ANAO analysis of AQIS data

a. Excludes passengers subject to 100 per cent baggage inspections.

b. Numbers may not sum to 100 due to rounding.

Airport leakage rates, 2002–03 to 2004–05 (per cent)

	Red E	Red Bench Red X-ray Green X-ray		Red X-ray		Overflow		
Year	Higher risk	Risk	Higher risk	Risk	Higher risk	Risk	Higher risk	Risk
2002–03	1.24	2.36	n.a.	n.a.	0.61	2.11	0.78	3.13
2003–04	0.48	2.49	0.51	2.16	0.27	2.15	0.74	3.05
2004–05	0.18	1.09	0.23	1.10	0.19	1.29	0.50	1.01

Source: AQIS

Estimated leakage at airports, by year (000's of items)

		2002–03		2003–04 2			2004–05		
Channel	Higher Risk	Risk	Total	Higher Risk	Risk	Total	Higher Risk	Risk	Total
AQIS Red benches	23.3	44.3	67.6	10.8	56.1	66.9	4.1	24.8	28.9
AQIS Red Channel X-Rays	1.2	4.3	5.6	5.3	22.4	27.7	3.3	15.9	19.2
Green Channel X-Rays	31.4	108.8	140.2	13.0	103.9	116.9	9.8	66.5	76.3
Overflow	5.9	23.6	29.5	7.8	32.1	39.9	5.0	10.1	15.1
Total	61.8	181.0	242.8	36.9	214.5	251.4	22.2	117.3	139.6

Source: ANAO analysis of AQIS data

Appendix 4: Effectiveness of Airports Intervention

Effectiveness of Airports program intervention, 2002–03 to 2004–05 (per cent)

Year	Risk level	Target	Effectiveness	
2002–03	Higher risk	87	75	
	Risk	50	61	
	Total	n.a.	66	
2003–04	Higher risk	87	86	
	Risk	50	58	
	Total	n.a.	68	
2004–05	Higher risk	87	91	
	Risk	50	73	
	Total	n.a.	79	

Source: ANAO analysis of AQIS data

Appendix 5: International Mail–Leakage Data

Channel		rvey sample ze	Total class volume		Sample as a percentage of
	Number	Percentage ^a	Number	Percentage ^a	volume
Letter class	4,951,399	96.2	124,297,333	86.5	3.98
Other articles	47,796	0.9	13,737,970	9.6	0.35
Parcels	20,596	0.4	2,199,549	1.5	0.94
EMS	16,694	0.3	1,418,892	1.0	1.18
Registered	112,543	2.2	1,978,546	1.4	5.69
Total	5,149,028	100	143,632,290	100	3.58

International Mail leakage survey sample size, 2004–05

Source: AQIS

a. Numbers may not sum to 100 due to rounding.

International Mail leakage rates, 2002–03 to 2004–05 (per cent)

Mail class	2002–03	2003–04	2004–05
Letter class	0.013	0.001	0.000
Other articles	17.792	0.163	0.184
Parcels	19.004	0.489	0.508
EMS	2.426	0.138	0.070
Registered	0.179	0.019	0.008
All mail	0.359	0.025	0.026

Source: AQIS

Estimated leakage at international mail centres, by year

	2002–03	2003–04	2004–05
Letter class	3,655	889	420
Other articles	501,780	23,019	25,298
Parcels	66,868	10,865	11,181
EMS	5,526	1,783	989
Registered	672	357	166
All mail	578,501	36,913	38,054

Source: AQIS

Effectiveness of International Mail intervention Appendix 6:

Effectiveness of International Mail Intervention, 2002–03 to 2004–05 (per cent)

		Higher risk			Risk			Total risk	
Mail class	2002-03	2003–04	2003-04 2004-05	2002–03	2002-03 2003-04	2004-05	2002–03	2003–04	2004–05
Letter class	62	94	98	45	94	67	52	94	97
Other articles	63	59	48	1	49	49	2	52	48
Parcels	71	71	78	12	74	70	19	74	72
EMS	92	90	98	40	88	92	52	88	93
Registered	100	92	96	62	87	92	67	89	94
All mail	74	74	70	3	68	68	9	70	69

Source: ANAO analysis of AQIS data

ANAO Audit Report No.19 2005–06 Managing for Quarantine Effectiveness–Follow-up

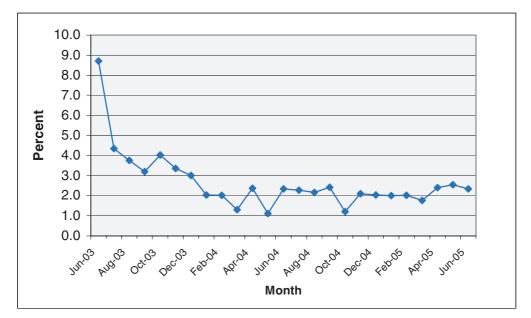
Appendix 7: External Inspection of Sea Containers– Leakage Data

Sea containers–leakage survey sample size, June 2002 quarter to June 2005 quarter

	Apr-Jun 2002	Apr-Jun 2003	Apr-Jun 2004	Apr-Jun 2005
Total volume of sea containers (number)	289,019	311,024	347,155	368,372
Sample size of leakage survey (number)	2,177	2,953	2,587	2,307
Percent of total selected in leakage sample	0.75	0.95	0.75	0.63

Source: ANAO analysis of AQIS data

Sea containers—leakage rates, June 2003 to June 2005 (per cent)



Source: ANAO analysis of AQIS data

ANAO Audit Report No.19 2005–06 Managing for Quarantine Effectiveness–Follow-up

Appendix 8: ICPMS Project

There are four elements to the Import Clearance Performance Management System:

- (a) a work allocation system that will develop a model for surveillance of the various types of imports, and will determine the type and volume of data to collect;
- (b) a data collection system that will store data verifying the integrity of imported cargo and packaging;
- (c) a management information system that will identify areas that may be compromising quarantine integrity; and
- (d) a distribution system that will communicate performance data to the relevant people for action.

The project will identify an effectiveness indicator for each activity as a whole. However, AQIS' intention is to analyse the performance data for each activity arising from the project, to determine whether higher risk sub-activities can be targeted for additional scrutiny.

The project has several phases. The results of each phase will be evaluated and lessons learned will feed into the next phase. Each phase will operate using the project management framework, with a defined governance structure, budget and timetable.

The first phase of the project has been conducted. The scope of this phase was to collect data about, *inter alia*, the efficacy of treatments performed on imported packing and packaging. Interim results indicate that the treatments were effective. No live insects were detected.

AQIS will continue to run a small number of tests on the efficacy of treatments performed on imported packing and packaging to ensure that the treatments remain effective.

The project plans for phases two and three have been developed, and the phases will commence in the second half of 2005. Phase two will examine the efficacy of fumigation certificates, and determine whether there is a need for further intervention with consignments. Phase three will examine the effectiveness of the AQIS profiling system, in particular, whether there is any leakage of quarantine material because of ineffective profiles.

Index

Α

Airport, 17, 57, 60-62, 67-68, 70-71, 104

Airport Overflow of passengers, 60, 68

Appropriate Level of Protection, 7, 16, 32, 45-48, 97, 102

Australian Customs Service, 28, 63, 101, 112 Australian Fumigation Accreditation Scheme, 7,

90 Australian Quarantine and Inspection Service, 7-9, 13-18, 21, 26-30, 41, 54- 96, 100-101, 104-109

В

Biosecurity Australia, 7, 13, 15-16, 18-20, 25-26, 29-44, 46, 48-53, 97-99, 101

Border, 8-9, 13-14, 17-18, 26-27, 29, 54-61, 63-69, 72, 77, 81, 84, 85-86, 90-91, 95-96 Breach, 87-88

С

Canadian Accredited Timber Scheme, 7, 21, 87, 89

Cargo, 6, 13, 18, 26, 28, 30, 62-64, 74, 76-77, 79, 82, 84-86, 91, 95-96, 100, 109, 112 Conflict of interest, 43, 50-52, 99

D

Department of Agriculture, Fisheries and Forestry, 13-14, 18-21, 25-26, 28-29, 34-35, 38, 44-45, 48, 50, 53, 59, 79-80, 82, 89, 95-100, 102 Department of the Environment and Heritage, 49-50, 53, 81, 99 Detection, 8, 18, 21, 54, 58-59, 66, 78, 88-89, 96 Detector Dogs, 73 Disease, 9, 14, 15, 25, 29, 32, 37-38, 41, 47, 55-56, 58, 76, 89, 97

Ε

Effectiveness indicators, 16, 56-58, 65-67, 70-73, 77-78, 96 Effectiveness measures, 66 Effectiveness targets, 16-17, 54, 56-57, 63, 70, 76, 95

ANAO Audit Report No.19 2005–06 Managing for Quarantine Effectiveness–Follow-up Eminent Scientists Group, 15, 20, 43-44

Import Risk Analysis, 7, 13-16, 20, 25, 28, 32-46, 49-53, 97-99, 101, 103, 115
Increased Quarantine Intervention, 7, 14, 16, 55-57, 59, 60, 66, 70, 73-78, 96
Incursion, 47, 88
Intervention, 7-8, 14, 29, 54-57, 60-63, 68-69, 72, 91, 95, 105, 107, 109
Intervention indictor, 8, 56

J

Joint Committee of Public Accounts and Audit, 7, 14-15, 19, 29-30, 32, 34-35, 45, 48-53, 79-83, 95, 99-101

L

Leakage, 8, 61-65, 67-69, 72-75, 77, 96, 104, 106, 108-109

Μ

Mail, 13, 16, 17, 26, 28, 30, 38-39, 54, 56-60, 64, 66-67, 70-74, 95, 106, 107 Market access request, 16, 32, 53 Memorandum of Understanding, 7, 50, 53, 99

0

Overseas, 6, 8, 13, 18, 26-27, 32, 43, 57, 84-87, 89-92, 96

Ρ

Performance measure, 62, 65, 87
Pest, 9, 15, 25, 32, 37-38, 41, 47, 58, 63, 76, 81, 89-91, 97, 102
Ports, 13, 18, 21, 26, 46, 57, 70, 75, 81-82, 88-89
Pre-border Cargo Quarantine Arrangements, 85-86
Prohibited items, 13, 16-18, 26-27, 56, 58, 60-61, 64-65, 67-68, 70-72, 77, 95
Prohibited material, 17, 18, 58, 68

Q

Quarantine policy, 13, 15-16, 26-27, 30, 32, 36, 53, 58 Quarantine risk material, 8-9, 16-17, 21, 41, 54-56, 58-60, 62, 65, 74, 83, 90, 95, 100 Quarantine Import Clearance, 7 Quarantine Resourcing Indicators, 7, 58-59

R

Risk management, 14-15, 28, 40-41, 46, 54-55, 57-59, 77, 95, 102 Risk profile, 9, 59, 60, 62, 95

S

Stakeholder, 5, 15-16, 30, 34, 36-44, 46, 48-50, 53, 75, 77, 80-81, 83, 97, 100-101, 112

Series Titles

Audit Report No.18 Performance Audit *Customs Compliance Assurance Strategy for International Cargo* Australian Customs Service

Audit Report No.17 Performance Audit Administration of the Superannuation Lost Members Register Australian Taxation Office

Audit Report No.16 Performance Audit The Management and Processing Leave

Audit Report No.15 Performance Audit Administration of the R&D Start Program Department of Industry, Tourism and Resources Industry Research and Development Board

Audit Report No.14 Performance Audit Administration of the Commonwealth State Territory Disability Agreement Department of Family and Community Services

Audit Report No.13 Performance Audit Administration of Goods and Services Tax Compliance in the Large Business Market Segment Australian Taxation Office

Audit Report No.12 Performance Audit Review of the Evaluation Methods and Continuous Improvement Processes for Australia's National Counter-Terrorism Coordination Arrangements Attorney-General's Department The Department of the Prime Minister and Cabinet

Audit Report No.11 Business Support Process Audit The Senate Order for Departmental and Agency Contracts (Calendar Year 2004 Compliance)

Audit Report No.10 Performance Audit Upgrade of the Orion Maritime Patrol Aircraft Fleet Department of Defence Defence Materiel Organisation

Audit Report No.9 Performance Audit *Provision of Export Assistance to Rural and Regional Australia through the TradeStart Program* Australian Trade Commission (Austrade)

Audit Report No.8 Performance Audit Management of the Personnel Management Key Solution (PMKeyS) Implementation Project Department of Defence Audit Report No.7 Performance Audit Regulation by the Office of the Gene Technology Regulator Office of the Gene Technology Regulator Department of Health and Ageing

Audit Report No.6 Performance Audit Implementation of Job Network Employment Services Contract 3 Department of Employment and Workplace Relations

Audit Report No.5 Performance Audit A Financial Management Framework to support Managers in the Department of Health and Ageing

Audit Report No.4 Performance Audit Post Sale Management of Privatised Rail Business Contractual Rights and Obligations

Audit Report No.3 Performance Audit Management of the M113 Armoured Personnel Carrier Upgrade Project Department of Defence

Audit Report No.2 Performance Audit Bank Prudential Supervision Follow-up Audit Australian Prudential Regulation Authority

Audit Report No.1 Performance Audit Management of Detention Centre Contracts—Part B Department of Immigration and Multicultural and Indigenous Affairs

Better Practice Guides

Public Sector Audit Committees	Feb 2005
Fraud Control in Australian Government Agencies	Aug 2004
Security and Control Update for SAP R/3	June 2004
AMODEL Illustrative Financial Statements 2004	May 2004
Better Practice in Annual Performance Reporting	Apr 2004
Management of Scientific Research and Development	
Projects in Commonwealth Agencies	Dec 2003
Public Sector Governance	July 2003
Goods and Services Tax (GST) Administration	May 2003
Managing Parliamentary Workflow	Apr 2003
Building Capability—A framework for managing	
learning and development in the APS	Apr 2003
Internal Budgeting	Feb 2003
Administration of Grants	May 2002
Performance Information in Portfolio Budget Statements	May 2002
Life-Cycle Costing	Dec 2001
Some Better Practice Principles for Developing	
Policy Advice	Nov 2001
Rehabilitation: Managing Return to Work	June 2001
Internet Delivery Decisions	Apr 2001
Planning for the Workforce of the Future	Mar 2001
Contract Management	Feb 2001
Business Continuity Management	Jan 2000
Building a Better Financial Management Framework	Nov 1999
Building Better Financial Management Support	Nov 1999
Managing APS Staff Reductions	
(in Audit Report No.49 1998–99)	June 1999
Commonwealth Agency Energy Management	June 1999
Cash Management	Mar 1999

ANAO Audit Report No.19 2005–06 Managing for Quarantine Effectiveness–Follow-up

Security and Control for SAP R/3	Oct 1998
Selecting Suppliers: Managing the Risk	Oct 1998
New Directions in Internal Audit	July 1998
Controlling Performance and Outcomes	Dec 1997
Management of Accounts Receivable	Dec 1997
Protective Security Principles	
(in Audit Report No.21 1997–98)	Dec 1997
Public Sector Travel	Dec 1997
Audit Committees	July 1997
Management of Corporate Sponsorship	Apr 1997
Telephone Call Centres Handbook	Dec 1996
Paying Accounts	Nov 1996
Asset Management Handbook	June 1996