Australian Government

Inspector-General of Biosecurity

Military biosecurity risk management in Australia

Review report No. 2018–19/01

Cataloguing data
This publication (and any material sourced from it) should be attributed as: Inspector-General of Biosecurity 2018, *Military biosecurity risk management in Australia*, Department of Agriculture and Water Resources, Canberra, July. CC BY 4.0.

ISBN 978-1-76003-162-6

Internet
This publication is available at igb.gov.au/Pages/completed-audits-and-reviews.aspx.

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Credits
Front cover photograph courtesy of Australian Government Department of Defence.

Acknowledgements
The IGB gratefully acknowledges cooperation and advice of Australian Government Department of Agriculture and Water Resources and Department of Defence officials.

Contents

Review process

1 Purpose

The purpose of this review was to examine:

1. How the mechanisms and support provided by the Australian Government Department of Agriculture and Water Resources to the Australian Government Department of Defence, including the Australian Defence Force, and foreign defence forces contribute to achieving a commitment to biosecurity principles by those forces.
2. The adequacy and practicality of biosecurity risk management measures and mechanisms to ensure defence force compliance with their implementation.

2 Scope

This review covered how the Department of Agriculture and Water Resources (Agriculture) and Australian and foreign defence forces deliver Australian biosecurity outcomes during military-related activities. This included:

- governance and collaborative arrangements between Agriculture and Australian and foreign defence forces
- how Agriculture collaborates with defence forces to
  - advise, guide, train and assist Australian and foreign defence forces on biosecurity requirements
  - inspect returning Australian and arriving foreign military personnel, goods and conveyances in accordance with its policies and procedures
  - respond to, report and resolve biosecurity incidents/risks involving Australian and foreign defence forces
  - review the effectiveness of military arrangements for compliance with biosecurity requirements
  - deliver collaborative and/or complementary action for biosecurity management services for Australian and foreign defence forces.

3 Out of scope

This review did not examine policies or activities that are the prime responsibility of the Australian Government Department of Defence (Defence) and/or other stakeholders, including state/territory agencies.

4 Potential risks

Potential risks considered as part of this review included:

- inadequacy and incorrect use of Agriculture's risk-based methodologies to detect, identify and treat hitchhiker pests and contaminants
- non-provision of appropriate and/or timely information to Agriculture by other stakeholders to allow it to carry out its responsibilities
- non-provision of appropriate and/or timely information from Agriculture to stakeholders to allow them to carry out their responsibilities
- inadequacy of capacity and/or expertise to meet demands for clearance of military personnel, goods and conveyances
- insufficient departmental resources or capabilities to address relevant biosecurity risks.

5 Review methodology

The Inspector-General of Biosecurity (IGB):

- met with key stakeholders (Agriculture and Defence) to
  - communicate review objectives and scope
  - outline responsibilities
  - identify risks related to the review and appropriate mitigation strategies
  - obtain initial background information about the review
  - provide an opportunity for all parties to discuss proposed review process
- discussed preliminary data requests with Agriculture and Defence officers
- conducted a desktop audit of relevant Agriculture data, policies and procedures for biosecurity risk management of military personnel, aircraft, vessels and cargo
- undertook field work to observe and verify Agriculture and Defence risk-management procedures and operations
- conducted exit interviews with stakeholders to
  - provide an overview of initial review findings
  - provide an opportunity for stakeholders to correct any misunderstandings or misinterpretations, and provide feedback on the review process
- developed a draft report with key findings and recommendations
- asked relevant Agriculture and Defence business areas to check facts, correct any errors or misunderstandings and provide further evidence
- developed a revised review report and asked the Secretary, Department of Agriculture and Water Resources, to provide a management response and identify sensitivities.

6 Review team

Dr Naveen Bhatia and Ms Megan Loram assisted the Inspector-General in this review.

Summary

1 Biosecurity risks due to military movements

The Australian Government uses a complex system of biosecurity risk management measures to prevent entry into Australia of exotic pests and diseases. However, military aircraft, vessels, vehicles, equipment and personnel kits provide pathways into Australia for exotic pests and diseases and present special biosecurity risks. Military equipment and conveyances operate in many different international environments and frequently land or arrive in Australia at non-first points of entry. Equipment and conveyances can be specialised and complex, making them difficult to inspect. High security is also often necessary during inspection.

Many pests have been introduced to new countries via military movements, including during World War II. The Australian and United States (US) governments in particular have improved military-specific biosecurity risk management protocols and practices in response.

Military movements that may present biosecurity risk management challenges include:

- Australian forces returning from overseas military, peacekeeping or humanitarian deployment
- Australian and foreign defence forces conducting combined exercises and training in Australia
- other foreign military visits, such as those accompanying dignitaries.

2 Governance of military biosecurity arrangements

The Australian Government manages military biosecurity risks through collaboration between the Department of Agriculture and Water Resources (Agriculture) and the Department of Defence including the Australian Defence Force (Defence). This collaboration takes into account Agriculture's obligations and powers under the *Biosecurity Act 2015* (Cth) and Defence's obligations and powers to defend Australia.

A memorandum of understanding (MoU) between Agriculture and Defence, last updated in February 2018, sets out the roles and responsibilities of each department. The MoU sets out the representation and duties of both departments at strategic, policy and operational levels. Agriculture and Defence have policies and procedures in place to manage biosecurity risks and ensure that roles and responsibilities are clear and understood.

Agriculture works closely with Defence and foreign defence forces, particularly US defence forces, to ensure they understand and comply with Australia's biosecurity requirements. The Australian Government imposes the same biosecurity requirements on defence forces as it does on other importers.

The US Government claims sovereign immunity—the right to refuse entry by the Australian Government—over its military conveyances. Agriculture manages potential biosecurity risks by advising US defence forces involved in exercises or visiting Australia on biosecurity requirements and training US personnel in managing biosecurity risks.

3 Australian and foreign defence force biosecurity training

Agriculture and Defence use biosecurity policies and training manuals (including cleaning manuals and instructional material for special military inspections) to ensure that biosecurity risks are managed, and roles and responsibilities are clear and understood. Most relevant Agriculture training material is also available for Defence use.

Agriculture regularly attends planning conferences ahead of major Defence exercises and delivers presentations to raise awareness of Australian biosecurity requirements. It also trains select US defence force and US Department of Agriculture staff in Australia's biosecurity inspection requirements and accredits them as 'Agriculture-approved inspectors' (AAIs). AAIs can inspect US sovereign-immune aircraft and goods—previously inspected offshore by Agriculture biosecurity officers—entering Australian training grounds from US sovereign-immune vessels.

4 Military biosecurity risk management by entry pathway

The *Biosecurity Act 2015* provides Agriculture with comprehensive powers to implement biosecurity risk management for incoming aircraft, ships, goods, people, animals and plants.

Military forces intending to bring aircraft or vessels into Australia must submit prescribed pre-arrival reports, and aircraft and vessels must arrive at first points of entry (unless granted permission from Agriculture to arrive/land elsewhere).

Military airfields are not normally staffed by biosecurity officers, limiting Agriculture's ability to conduct on-arrival biosecurity inspections. Agriculture and Defence should collaborate to permanently station at least one biosecurity officer at the busy RAAF Base Amberley to improve biosecurity risk management and service delivery.

Australian naval military arrivals appear to be well managed but foreign naval visitors seem occasionally unclear on Australian biosecurity requirements. Agriculture manages foreign naval arrivals similarly to commercial vessels and educates foreign navies on Australian biosecurity requirements.

Agriculture uses special offshore and onshore inspection arrangements for some Australian and foreign movements into Australia. Military personnel must ensure that all assets are cleaned and free from biosecurity risk material before Agriculture biosecurity officers conduct inspections.

Agriculture must continue to maintain an appropriately trained workforce to respond to heightened demands ahead of major military exercises, and to provide adequate numbers of inspectors without compromising other biosecurity functions. Agriculture cost-recovers most of its biosecurity risk management activities, and it should seek government approval to exempt these from future efficiency dividends and staff caps.

Agriculture and Defence should work collaboratively to add a schedule to the existing MoU to allow Defence to undertake approved biosecurity activities. This should be consistent with Agriculture requirements, verification measures and compliance monitoring for other third-party approved arrangements. This will ensure consistency in biosecurity inspections and adequate biosecurity risk management.

Ongoing biosecurity surveillance at Defence sites is critical to detecting exotic pests that may not have been identified during initial inspections. An amendment to the MoU is necessary to better define Agriculture and Defence roles and responsibilities for surveillance and response.

5 Conclusion

Agriculture and Defence are cooperating well to manage the biosecurity risks of Australian and foreign military movements into Australia. Biosecurity risk management measures are well planned and well implemented. However, Australia will continue to face significant biosecurity challenges from many quarters, and ongoing thorough implementation of proven measures will be required. The recommendations in this report are intended to complement actions already established in both agencies to identify and address current and future biosecurity challenges.

Recommendations and departmental responses

The full departmental response to the recommendations is at Appendix A.

Recommendation 1

The department should negotiate with the Department of Defence to permanently station at least one biosecurity officer at RAAF Base Amberley to improve biosecurity service delivery.

Department's response: Agreed.

The department will work collaboratively with the Department of Defence to provide more efficient biosecurity inspection activities at RAAF Base Amberley. It is expected that the biosecurity officer stationed at RAAF Base Amberley will also undertake a range of cost-recovered inspection activities in the Ipswich and greater area of Brisbane.

Recommendation 2

The department should continue to ensure that provision of adequately trained biosecurity officers for offshore and onshore activities ahead of and during combined military activities in Australia does not compromise other essential biosecurity functions.

Department's response: Agreed.

The department is continuing to strengthen workforce resource prioritisation processes to biosecurity officer allocation for offshore and onshore activities and to ensure that offshore activities do not compromise essential biosecurity functions.

Recommendation 3

The department should continue to ensure it has adequate long-term funding to manage military biosecurity risk. It should make the case to government to ensure its:

- resourcing is linked to growth in military activities and biosecurity risks
- cost-recovered functions are exempt from efficiency dividends and staff caps.

Department's response: Agreed.

The department will continue to advise government of the resourcing required to deliver all functions, including military biosecurity risk management.
The department will work within the Budget rules as required and will make representations to government as to the application of those rules as appropriate.

Recommendation 4

The department and the Department of Defence should add a schedule to their memorandum of understanding to enable Defence to undertake biosecurity activities in ways that are consistent with requirements for other third-party approved arrangements.

Department's response: Agreed.

The department has commenced drafting a new schedule to the Memorandum of Understanding to allow Defence to undertake such biosecurity activities.

Recommendation 5

The department and the Department of Defence should modify their memorandum of understanding to define roles and responsibilities for biosecurity surveillance and prescribed pest management responses on Defence sites. This should include stakeholder communication and funding arrangements.

Department's response: Agreed.

As part of its recent announcement of $313 million in additional biosecurity measures, the Australian Government announced:

- $1 million a year on-going to support the department's ability to respond to biosecurity incidents in areas of Commonwealth responsibility
- additional resources to develop plans for high risk Commonwealth places and develop staff capability to manage responses to pest or disease incursions on Commonwealth places.

The department is also currently developing policies in relation to managing responses to biosecurity incidents on Commonwealth places (including Department of Defence sites). This policy development will include consultation with the Department of Defence and consideration of any required amendments to the MoU with the Department of Defence, to reflect and clearly articulate the roles and responsibilities of each party for biosecurity surveillance and pest management responses on Defence sites.

Dr Helen Scott-Orr
Inspector-General of Biosecurity
26 July 2018

Chapter 1

Biosecurity risks resulting from military movements

1.1 Military-specific biosecurity risks

Australia's isolated geographic location and stringent biosecurity controls help prevent entry of many of the world's most dangerous pests and diseases. Their entry could threaten the country's $32 billion agricultural industries, unique environment, native flora and fauna, tourism and lifestyle. Pests and diseases can enter as hitchhikers or in contaminating biosecurity risk material, and the Australian Government Department of Agriculture and Water Resources (Agriculture) uses several measures to manage these risks (Inspector-General of Biosecurity 2018).

Military aircraft, vessels, vehicles, equipment and personnel kits entering Australia may complicate and weaken these risk-management measures because:

- they operate in a wide variety of environments internationally
- military aircraft, vessels, equipment and people may land at non–first points of entry due to operational requirements
- military equipment and conveyances are often specialised, complex, and difficult to inspect
- high security must be maintained during inspection.

The movement of military assets is thought to have spread numerous hitchhiker pests (stowed away in cargo holds, aircraft cabins, maritime vessels and shipping containers) during and after World War II. For example, half of the 12 invasive species discovered on Okinawa Island, Japan, between 1945 and 1973 were first identified around the military bases. Before 1972, aircraft, warships and military cargo visiting US military bases on the island were exempt from plant quarantine regulations (Teruya, Araki & Osada 1973).

Insects and their eggs, fungi, nematodes and seeds may be carried by soil stuck to vehicles, machinery, packaging boxes, boots, camouflage netting and personal equipment. The South African narrow-leaved ragwort (*Senecio inaequidens*) is a serious weed pest that was probably introduced to Europe via soiled military equipment during World War II (Hulme 2007).

Agriculture treats military movements into Australia as high biosecurity risk. Therefore, it applies the same biosecurity requirements to the military as it does to importers of other high-risk goods.

1.2 Military forces and equipment entering Australia

Military movements into Australia fall into three categories:

- Australian defence forces returning to Australia
- Australian and foreign military exercises
- foreign military visits.

Australian defence forces returning to Australia

Vehicles, equipment, vessels and aircraft being returned to Australia can harbour hitchhiker pests and contaminants acquired during overseas deployment. Defence deploys these assets in different countries and environments for military, peacekeeping or humanitarian (such as disaster response) missions and for short or long periods. Examples of recent humanitarian assistance and disaster relief include Operation Vanuatu Assist 2017 (following a volcanic eruption) and Operation Fiji Assist 2016 (following Cyclone Winston). On these missions, personnel, plant equipment, tools, heavy vehicles and aid material are moved either by RAAF aircraft or by sea on light landing craft. Equipment may be returned to Australian bases in peri-urban or rural areas, increasing the risk that exotic pests or diseases could spread to local plant or animal populations.

Australian and foreign military exercises

Australia hosts military exercises involving Australian and foreign forces. These exercises give allies experience in planning and conducting combined military activities, and improve combat readiness and interoperability. Foreign defence forces usually bring their own conveyances and equipment, providing multiple pathways for the introduction of biosecurity risk material. Exercises may involve beach or parachute landings, where Agriculture cannot provide normal biosecurity border inspection and clearance, and other arrangements must be made.

Exercise Talisman Sabre is the largest of the combined military exercises hosted by Australia. It is held every two years between Australian, US, New Zealand (NZ) and occasionally other defence forces at Shoalwater Bay and other Queensland and Northern Territory locations, and the Coral, Timor and Arafura seas. The exercise involves land-based, air and maritime activities focused on the planning and conduct of mid-intensity 'high-end' warfighting.

The Talisman Sabre 2017 military footprint was significant and presented considerable biosecurity challenges and risks. It involved about 30,000 Australian, Canadian, Japanese, NZ and US personnel; over 20 naval vessels; over 200 aircraft; and tonnes of vehicles and general military cargo. Agriculture's biosecurity objectives were to ensure all participating military personnel entering Australia understood and met Australia's biosecurity requirements, minimising the risk of exotic pests or diseases entering and spreading.

After each Talisman Sabre exercise, Agriculture reviews biosecurity planning and processes and prepares a formal report including findings and recommendations for implementation for the next exercise. The Talisman Sabre 2015 post-implementation review made 41 recommendations, and Agriculture, Defence and the US military implemented almost all of those for Talisman Sabre 2017. The recommendations implemented related to increased and timely communication, offshore pre-shipment inspections, Agriculture-approved inspectors (AAIs) and various key processes. Recommendations not implemented related to clearance of goods on sovereign-immune vessels (not supported) and a review of helicopter intervention requirements (competing priorities).

Agriculture's Talisman Sabre 2017 post-implementation review made 38 recommendations, covering the same categories as its Talisman Sabre 2015 report, to ensure continuous improvement in biosecurity risk management through the review process.

Exercise Pitch Black is the Royal Australian Air Force's largest and most complex air exercise. It is held every two years in the Northern Territory, and typically involves up to 2,500 personnel and over 100 aircraft from around the world.

Exercise Hamel is a major Australian Army exercise held every two years (alternating years with Exercise Talisman Sabre) in Defence training grounds across Australia. Its aim is to test brigade combat readiness.

Vector Balance Action is a combined military activity between Australian and US defence forces held in Western Australia. It is run every two years.

Marine Rotational Force, Darwin is a force of over 1,250 US Marine Corps personnel who rotate through the Northern Territory every six months. Exercises and training are held jointly with Australian Defence Force personnel.

Exercise Wallaby is Singapore's major annual unilateral training activity held in Australia. It involves about 5,000 Singapore Armed Forces personnel and their equipment.

Foreign military visits

Foreign military aircraft and vessels also visit Australia for other purposes, such as stopovers during longer voyages or transporting foreign dignitaries into the country. Agriculture liaises with Defence and relevant countries to ensure Australia's biosecurity requirements are met.

Military arrival volumes

Volumes of military arrivals can be high. Defence does not routinely record vessel and cargo arrival data/information for foreign defence forces that enter Australia.

Table 1 shows Australian, US and NZ military assets, cargo and personnel that were cleared for entry to Australia by Agriculture for Joint Operations Command and/or 1st Joint Movement Unit coordinated exercises in Australia in 2017–18.

TABLE 1 Military assets and personnel cleared by Department of Agriculture and Water Resources for Joint Operations Command and/or 1st Joint Movement Unit, 2017–18

Military asset and personnel	Total
Australian Defence Force ships (no.)	1
Australian Defence Force aircraft (no.)	131
Foreign ships (no.)	4
Foreign aircraft (no.)	72
Personnel (no.)	10,101
Cargo (no.)	5,250,625

Source: Department of Defence

Chapter 2

Governance of military biosecurity arrangements

2.1 Agriculture and Defence roles

The *Biosecurity Act 2015* (Cth) provides the Australian Government Department of Agriculture and Water Resources (Agriculture) with comprehensive powers to implement biosecurity risk management measures for all incoming aircraft, ships, goods, people, animals and plants arriving in Australia. Its biosecurity officers assess, inspect and arrange treatments, including offshore, to minimise biosecurity risks associated with these arrivals.

Agriculture and the Department of Defence (Defence) collaborate to manage military-specific biosecurity risks by developing appropriate biosecurity governance arrangements, policies and procedures, training materials and activities. Agriculture provides operational support for biosecurity risk management programs agreed with Australian and foreign defence forces, particularly US defence forces, to ensure they understand and comply with Australia's biosecurity requirements. Defence ensures effective management of biosecurity risks associated with Australian and foreign military movements into Australian territory, and between external territories and the mainland.

The *Quarantine Act 1908* did not bind the Commonwealth—which included Defence, as a representative of the Commonwealth—so under this legislation Commonwealth entities were not obliged to comply with quarantine requirements. In 2005 Agriculture and Defence addressed this shortcoming by agreeing on quarantine obligations and requirements in a memorandum of understanding (MoU). The MoU was periodically revised until the *Biosecurity Act 2015* (Cth) superseded the Quarantine Act in 2016, better defining the two agencies' roles.

On 19 February 2018 a new MoU between Agriculture and Defence came into force. It covers operational deployments of Australian military overseas and operations with foreign defence forces in Australia. Under the MoU:

- Agriculture's role is to
  - provide advice, guidance and assistance to Defence on biosecurity requirements, which may include developing biosecurity awareness packages for the Australian Defence Force
  - conduct inspections of defence personnel, goods and conveyances in accordance with its policies and procedures
  - advise Defence of all incidents of non-compliance and liaise to resolve them
  - respond to Defence reports of issues of biosecurity concern.
- Defence's role is to
  - ensure its personnel understand and meet the requirements of the *Biosecurity Act 2015*
  - operate in accordance with legislative and other agreed requirements for pre-arrival reporting, seeking necessary permissions and approvals when entering Australian territory and unloading goods, and paying Agriculture fees and charges where applicable
  - ensure all defence personnel, goods and conveyances comply with biosecurity requirements
  - liaise with Agriculture in a timely manner to request inspections at first points of entry or non–first points of entry
  - liaise with Agriculture to resolve issues of non-compliance
  - report all issues of biosecurity concern to Agriculture.

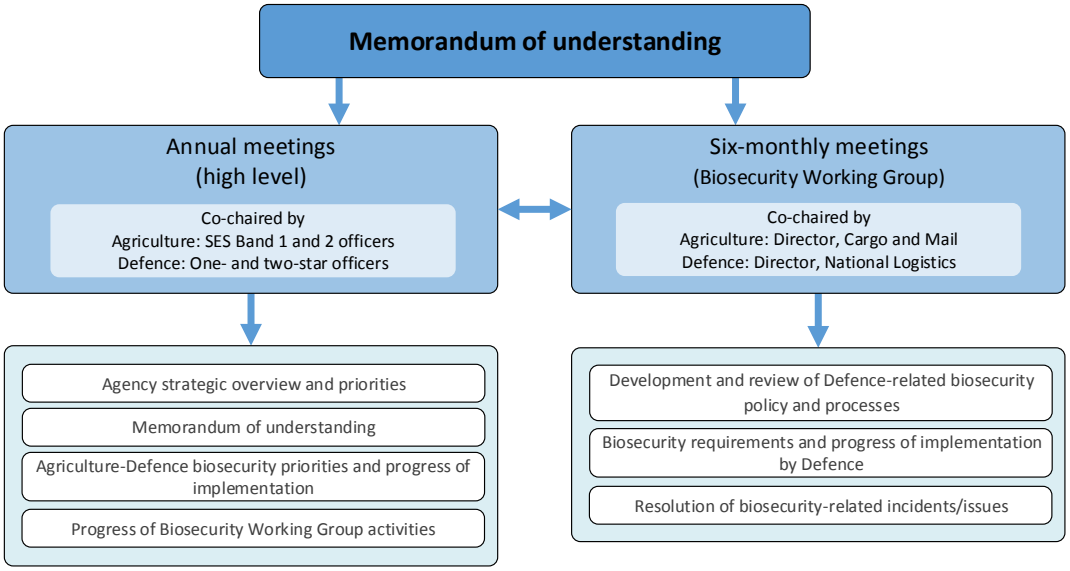
2.2 Coordination arrangements

Agriculture–Defence joint biosecurity management

The 2018 Agriculture–Defence MoU specifies each agency's representative and a single point of contact for each agency. Agriculture's Compliance Division is its main point of contact for Defence on biosecurity policy, priorities, implementation and issues resolution.

The Agriculture–Defence Biosecurity Working Group meets twice per year. Directors from Agriculture and Defence co-chair the group (Figure 1). Ongoing communication on routine issues occurs as needed between Agriculture's Military and Offshore Deployment Policy Team (Compliance Controls Branch) and Defence's National Logistics Team (Strategic Logistics Branch).

FIGURE 1 Agriculture–Defence relationship and governance structure



Source: Department of Agriculture and Water Resources

Day-to-day biosecurity operations

Agriculture regional offices (such as in Darwin, Perth and Townsville) and local personnel at Defence bases and Joint Movement Control offices communicate, coordinate and manage day-to-day biosecurity operations at the border, including arrivals and inspections.

Agriculture's Brisbane-based Military Operations Team, Inspection Services Group, Biosecurity Operations Division, responds to general military operational inquiries.

Military exercises in Australia

Agriculture's Military Operations Team advises on and coordinates biosecurity operations for Australian and foreign forces and Agriculture regional offices in the lead-up to and during military exercises. Team members attend military exercise planning conferences and deliver presentations on Australia's biosecurity requirements to participating forces. Agriculture's Military and Offshore Deployment Policy Team also attends planning conferences and meetings for major exercises like Talisman Sabre so they can address policy issues and sensitivities. This team also trains Agriculture-approved inspectors (AAIs) and negotiates offshore inspection arrangements and service level agreements.

Agriculture records non-compliance with biosecurity requirements during exercises and reports this to planners following an exercise.

Defence returns from operations

Defence engages with Agriculture as early as possible to coordinate returns from operations overseas, particularly if the return is sensitive and/or involves large volumes of equipment. The Military and Offshore Deployment Policy Team negotiates and coordinates biosecurity arrangements for major operations, and the Military Operations Team coordinates the biosecurity operations and liaises with relevant Agriculture regional offices.

Defense Attaché Office, US Embassy

Agriculture interacts regularly with the Defense Attaché Office (DAO) to manage biosecurity risks posed by incoming US military aircraft. The DAO advises Agriculture's Military and Offshore Deployment Policy and Military Operations teams of US military flight movements and arrivals (including if goods will be on board). These teams then disseminate this information to relevant local Agriculture offices for management. The Military Operations team would report any major non-compliance to the Military and Offshore Deployment Policy Team for escalation and resolution with the DAO, but to date none has been recorded by Agriculture.

Biosecurity-related inquiries from foreign forces

Agriculture directs general inquiries from foreign forces about biosecurity requirements to:

- the responsible Agriculture area for direct response (for example, on importing military working dogs or food), or
- the Military and Offshore Deployment Policy Team for coordination of responses directly to the foreign force or the Military Operations Team for liaison as appropriate.

2.3 Foreign military force sovereign immunity

Sovereign immunity is the right of foreign governments to refuse entry by the Australian Government. Under international law, all governments are entitled to invoke sovereign immunity on State-owned or State-operated vessels and aircraft arriving into Australian territory.

Biosecurity officers cannot board military vessels and aircraft owned by governments that invoke sovereign immunity. This means they are unable to carry out full vessel and aircraft inspections and/or verify mandatory documentation. They are able to carry out biosecurity functions under the *Biosecurity Act 2015* that do not involve boarding the vessel or aircraft. For example, if a government has invoked sovereign immunity for a military vessel, Agriculture increases gangway watches and monitoring for the duration of the military vessel's stay.

The US invokes sovereign immunity on all its State aircraft, ships and amphibious craft. To manage the biosecurity risk posed by these craft, the Australian and US governments have agreed that Agriculture staff train US Embassy and US Department of Defense reservists and select active duty personnel as AAIs to inspect most sovereign immune US military assets. Agriculture also trains US Department of Agriculture (USDA) personnel as AAIs to undertake and certify inspections.

AAIs are positioned on key US ships and at key Australian airports and RAAF bases during large training exercises, such as Talisman Sabre. AAIs are responsible for:

- inspecting sovereign-immune fixed-wing aircraft on Agriculture's behalf on arrival in Australia
- conducting verification inspections of goods that have been previously inspected offshore by Agriculture and that will be unloaded from US ships directly into training grounds in Australia
- inspecting sovereign-immune amphibious craft, helicopters and tilt-rotor aircraft on arrival in Australia or when moved from US ships directly to training grounds or Australian vessels.

Biosecurity waste, baggage, food products and plant or animal material carried off foreign military and other vessels by officers and/or crew are subject to biosecurity inspection as personnel disembark. Agriculture biosecurity officers inspect all equipment other than that being taken directly from a sovereign-immune US vessel into an Australian training ground. In these cases, Agriculture must inspect equipment offshore first and an AAI then checks the manifest and conducts a verification inspection on arrival. The AAI provides Agriculture with government-to-government certification of the inspection outcome.

These arrangements provide Agriculture with confidence that the biosecurity risks posed by the specified US military assets are managed acceptably.

The Australian Defence Force regularly engages with US forces, so Agriculture has put special arrangements in place for US defence forces entering Australian territory. The US Embassy, representing the US Government in Australia, supports its visiting forces by providing some coordination and information services. However, the US defence forces are solely responsible for meeting all Australian biosecurity requirements. The Australian Defence Force works with Agriculture and relevant US defence units to coordinate and oversee all biosecurity activities, including ensuring unit movements before and during exercises meet Australia's biosecurity requirements.

Chapter 3

Biosecurity training

3.1 Military biosecurity policy and operational documentation

The Australian Government Department of Agriculture and Water Resources (Agriculture) and the Department of Defence (Defence) have policies, cleaning manuals and inspection instructional materials to ensure that biosecurity risks are managed, and roles and responsibilities are clear and understood. These are:

- *Defence logistics manual*—biosecurity chapter (Department of Defence 2016)
- Agriculture's military instructional material
- ADF force extraction cleaning manual (Department of Defence 2016).

Defence logistics manual—biosecurity chapter

Agriculture wrote the biosecurity chapter of the *Defence logistics manual (Department of Defence 2016)*. The chapter sets out Australian Government biosecurity requirements that relate to Defence, and all Defence personnel are required to comply.

The manual covers vessels and aircraft, first points of entry and non–first points of entry, external territories, foreign military aircraft and vessels, food and food waste, human health, importation of goods, offshore pre-shipment inspections, plant biosecurity, visiting military forces, biosecurity documentation and inspection booking, animals, importation of human remains, roles and responsibilities, and compliance, monitoring and reporting.

Agriculture's military instructional material

Agriculture has developed instructional material on managing the biosecurity risk posed by defence forces. It includes guidelines and work instructions on:

- inspecting used military personal and cargo parachutes
- inspecting used personnel military kit
- processing charges for military clients
- military ship-to-ship movements
- managing sovereign-immune aircraft (almost completed as at June 2018)
- managing sovereign-immune vessels (almost completed as at June 2018).

Biosecurity requirements imposed on defence forces are the same as those imposed on other importers, so non–military specific instructional material also applies to defence forces. This includes instructional material on managing unscheduled aircraft, managing vessels, inspecting machinery and fulfilling import requirements listed on Agriculture's Biosecurity Import Conditions System (BICON).

ADF force extraction cleaning manual

The *ADF force extraction cleaning manual* guides Defence personnel and contractors preparing to return home after overseas deployment on cleaning their clothing, vehicles and equipment to meet Australian biosecurity requirements. Defence prepared the manual, and reviews and updates it with input and comment from Agriculture.

3.2 Agriculture-approved inspector training

Agriculture-approved inspector (AAI) training is underpinned by a sovereign immunity arrangement agreed to by senior representatives of Agriculture, the US Department of Defense and the US Department of Agriculture (USDA). This training consists of three tiers that must be completed sequentially:

1. Prerequisite training—USDA agricultural and customs training.
2. Remote training and evaluation.
3. Face-to-face classroom and on-site practical training.

This training is designed to instill confidence and knowledge in selected personnel to carry out biosecurity inspections and manage biosecurity risks associated with the entry of sovereign-immune US assets into Australian territory.

3.3 Pre-exercise training and planning

Agriculture attends military planning conferences for all major exercises in Australia to provide an overview of Australian biosecurity requirements and offshore inspections. This helps to improve understanding and compliance with biosecurity requirements, reducing the biosecurity risks associated with the exercise. In 2018 Agriculture attended planning conferences for these military exercises:

- Marine Rotational Force—Darwin
- Exercise Koolendong 18
- Exercise Hamel 18
- Exercise Kakadu 18
- Exercise Southern Frontier 18
- Exercise Talisman Sabre 19
- Exercise Pitch Black 18
- Wallaby 18.

US military cleaning guides

Agriculture has provided the US military with guides to help it understand and meet Australian biosecurity requirements. These advise how to prepare and clean certain vehicles and equipment such as rolling stock (trucks, trailers, vehicles), airframes (helicopters or tilt-rotor aircraft), vessels (hovercrafts) and personnel kit (pack and webbing).

Exercise Talisman Sabre Chief Exercise Instruction—Annex I—Biosecurity, Customs and Immigration

This document sets out the biosecurity, customs and immigration requirements for military forces entering Australian territory for Exercise Talisman Sabre. Agriculture and the Australian Government Department of Home Affairs (Home Affairs) wrote the instruction, with input from Defence and the US Department of Defense. Agriculture and Home Affairs are developing a general version of this document for other military exercises in Australia.

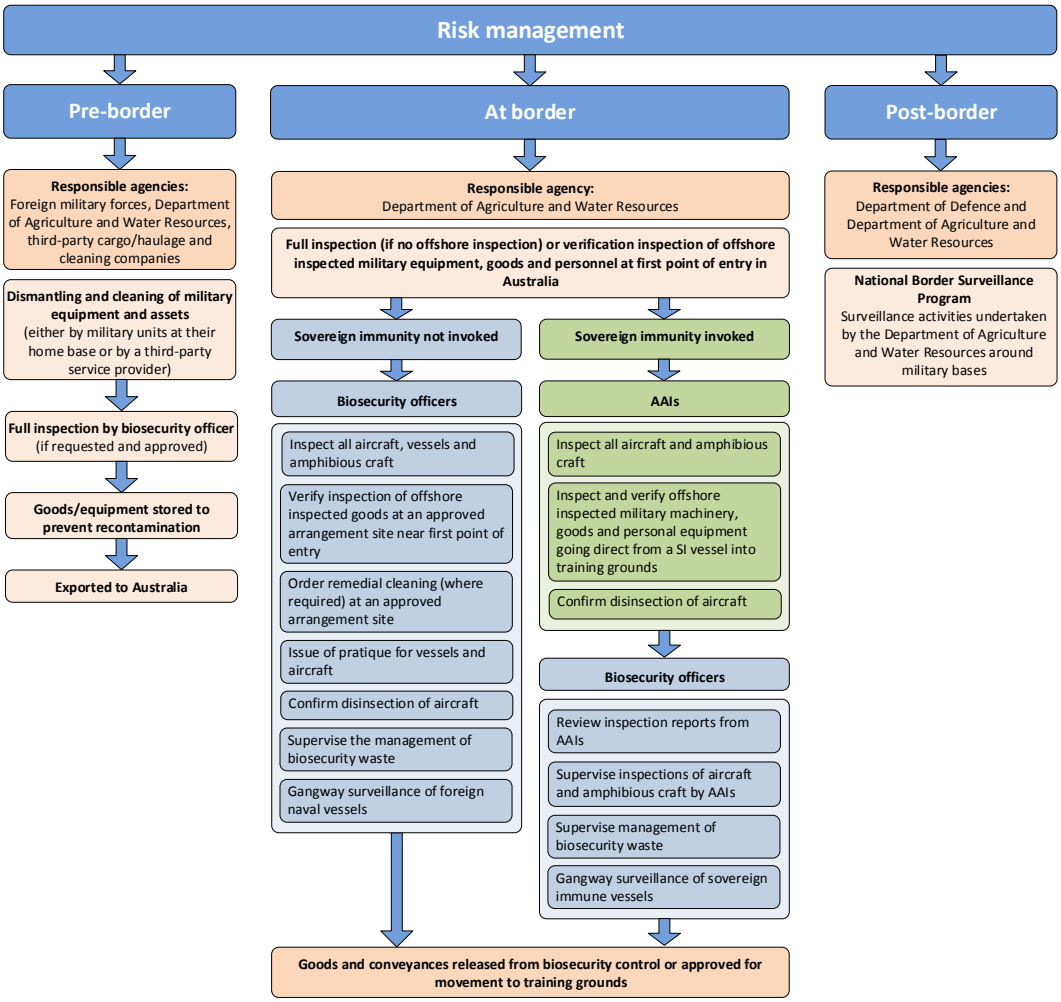
Chapter 4

Military biosecurity risk management and compliance by entry pathway

4.1 Military biosecurity risk management

Key features of military biosecurity risk management pre-border, border and post-border are shown in Figure 2.

FIGURE 2 Biosecurity risk management for military movements into Australia



AAI Agriculture-approved inspector.

4.2 First points of entry

All aircraft and ships entering Australian territory must arrive and goods must be unloaded at a first point of entry (Map 1) unless Agriculture has granted permission under the *Biosecurity Act 2015* (Cth) for arrival at another port.

MAP 1 First points of entry, airports and sea ports, Australia, 2018

Source: Department of Agriculture and Water Resources

4.3 Aircraft

Agriculture has determined 30 airports as aircraft first points of entry to Australia and its territories. These include eight solely for military use, three with civilian and military facilities and 19 mainly for civilian use (Table 2). International aircraft must enter Australia at a first point of entry unless Agriculture has granted permission for entry at a non–first point of entry. Defence forces may also need to obtain separate permission to have goods unloaded at a non–first point of entry.

Agriculture has reported that military aircraft normally comply fully with its biosecurity requirements. However, in 2016 Agriculture found several RAAF flights non-compliant. To address this, Agriculture directed all RAAF flights to land at an Agriculture-staffed first point of entry for inspection, to comply with Agriculture's biosecurity requirements. The RAAF subsequently amended its standing instructions to ensure compliance with biosecurity requirements. Agriculture accepted this RAAF commitment to meet biosecurity requirements. No RAAF flights have been found to be non-compliant since.

Agriculture requires information on all aircraft entering Australian territory (either from overseas or from/to/between the Australian external territories), regardless of first point of entry. This includes identification of the aircraft, intended first landing place, estimated day and time of arrival, name and contact details of aircraft operator or owner, and details of any animals/plants in the aircraft cabin.

TABLE 2 Military aircraft first points of entry and import-processing facilities

Airport name	Agriculture office	Animal and plant processing facilities	Imported goods processing facilities
Adelaide Airport	Adelaide	Animals and plants	All goods
Alice Springs Airport	Darwin	–	All goods
Avalon Airport	Melbourne	–	Personal effects as accompanied baggage only
Brisbane Airport	Brisbane	Animals and plants	All goods
Broome International Airport	Broome	Plants	All goods
Cairns Airport	Cairns	Animals and plants from New Zealand	All goods
Canberra Airport	ACT regional office	Plants, cats and dogs from New Zealand	Personal effects as accompanied baggage only
Christmas Island Airport	Christmas Island	Animals and plants	All goods
Cocos (Keeling) Islands Airport	Cocos Island	Animals and plants	All goods
Darwin International Airport and RAAF Base Darwin	Darwin	Plants, cats and dogs from New Zealand	All goods
Essendon Fields Airport	Melbourne	–	Personal effects as accompanied baggage only
Gold Coast Airport	Gold Coast	Live fish, cats and dogs from New Zealand	All goods
HMAS Albatross	Sydney	–	Personal effects as accompanied baggage only
Hobart Airport	Hobart	Animals and plants	All goods
Horn Island Airport	Cairns	Dead fish	Personal effects as accompanied baggage only
Lord Howe Island Airport	Sydney	–	Personal effects as accompanied baggage only
Melbourne Airport	Melbourne	Animals and plants	All goods
Norfolk Island Airport	Norfolk Island	Animals and plants	All goods
Perth Airport	Perth	Animals and plants	All goods
Port Hedland International Airport	Port Hedland	Plants	All goods except waste
RAAF Base Amberley	Brisbane	–	All goods
RAAF Base Edinburgh	Adelaide	–	All goods
RAAF Base Learmonth	Perth	–	–
RAAF Base Pearce	Perth	–	–
RAAF Base Richmond	Richmond	–	All goods
RAAF Base Tindal	Darwin	No	–
RAAF Base Williamtown	Newcastle	–	Personal effects as accompanied baggage only
Sunshine Coast Airport	Brisbane	Cats and dogs from New Zealand only	All goods
Sydney Airport	Sydney	Animals and plants	All goods
Townsville Airport and RAAF Base Townsville	Townsville	Plants, cats and dogs from New Zealand, fish (alive or dead)	All goods

Source: Department of Agriculture and Water Resources

Australian legislation specifies that all aircraft (including helicopters) must be disinsected in a manner approved by the Director of Human Biosecurity before arrival in Australia to prevent entry of insect vectors of human disease (Inspector-General of Biosecurity 2017). However, single- and dual-seat fighter aircraft pose minimal risk and aircraft operators may apply for an exemption from this requirement. They must apply to Agriculture at least 10 days before intended arrival. Applications for exemption are assessed by the Australian Government Department of Health on a case by case basis. Aircraft on board a naval vessel may also be exempted, provided the vessel has travelled for more than 24 hours before arrival, vector controls are in place and Agriculture has granted pratique on arrival.

Agriculture does not permanently station biosecurity officers at military bases. However, a biosecurity officer is needed to carry out inspections of most military flights on arrival. This creates a substantial servicing workload. Also, military aircraft may arrive early or at very short notice because flight schedules change for operational, weather or medical reasons.

RAAF Base Amberley airport handles about 50 per cent of military aircraft arrivals, making it the busiest military airport in Australia. It serves as a major landing ground for Australian and foreign aircraft engaged in military exercises in Australia and humanitarian and peace work in Pacific countries. RAAF Base Amberley also receives direct flights from the US and other flights carrying goods and personnel returning from overseas deployments.

Biosecurity officers must often travel to Amberley at short notice to inspect and clear goods and personnel. The 70-kilometre drive from the Agriculture regional office (near Brisbane airport) is especially time consuming in peak hours. Also, biosecurity officers may arrive for a planned inspection only to find that the plane has been unavoidably delayed, or people or cargo may be held until a biosecurity officer arrives. Defence should permit Agriculture to permanently station at least one biosecurity officer at Amberley. This would enable biosecurity staff to inspect and clear personnel and goods promptly after arrival, and to manage their time more efficiently. Biosecurity officers could service nearby areas when not required at Amberley.

Recommendation 1

The department should negotiate with the Department of Defence to permanently station at least one biosecurity officer at RAAF Base Amberley to improve biosecurity service delivery.

Department's response: Agreed.

The department will work collaboratively with the Department of Defence to provide more efficient biosecurity inspection activities at RAAF Base Amberley. It is expected that the biosecurity officer stationed at RAAF Base Amberley will also undertake a range of cost-recovered inspection activities in the Ipswich and greater area of Brisbane.

4.4 Naval vessels

Agriculture requires a pre-arrival report for all naval vessels entering Australia. The vessel captain must submit the report using the online Maritime Arrivals Reporting System (MARS) between 96 and 12 hours before arrival. Agriculture uses MARS to make consistent and thorough biosecurity risk assessments for all vessels (including military vessels) before their arrival into Australian ports so it can adequately manage all biosecurity risks (Inspector-General of Biosecurity 2018).

Between July 2016 and December 2017, biosecurity breaches were twice as high for naval vessels as for all commercial vessels. This was mainly due to foreign naval vessel breaches. In 2017 the percentage of breaches for foreign naval vessels was 26 per cent compared with 6 per cent for Australian naval vessels (Table 3). However, far more Australian (115) than foreign naval vessels (51) were inspected.

TABLE 3 Australian and foreign naval vessel inspections and breaches, 2017

Origin	Vessels inspected (no.)	Inspections (no.)	Breaches (no.)	Failure rate (%)
Australian naval vessels	115	160	10	6.2
Foreign naval vessels	51	127	33	26

Note: Number of vessel inspections is higher than number of vessels inspected because some vessels had more than one type of inspection.
Source: Department of Agriculture and Water Resources

Reasons for Australian and foreign naval vessel non-compliance are shown in Table 4.

TABLE 4 Australian and foreign naval vessels, biosecurity breach reasons, 2017

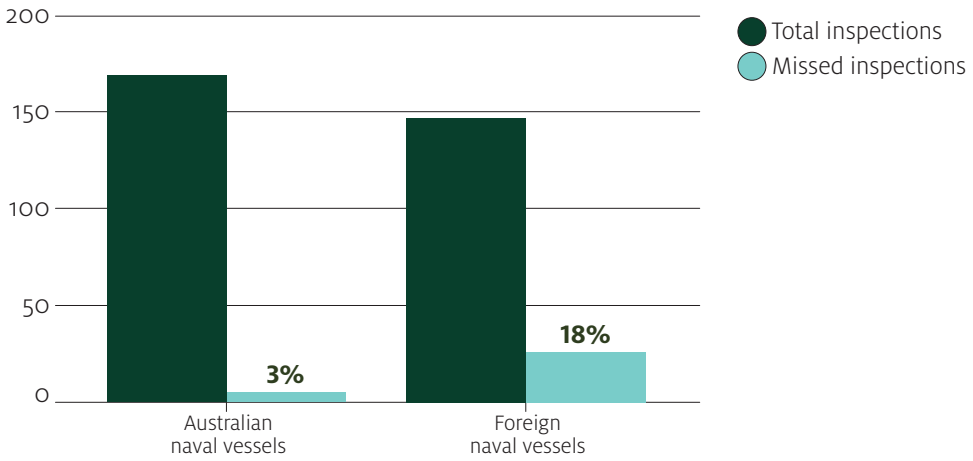
Breach reason	Australian vessels (no.)	Foreign vessels (no.)
Failure to follow directions on biosecurity status document	1	5
Infestation of insects found on board (minor)	2	0
Failure to present biosecurity status document	3	4
Incorrect reporting on ballast water report (minor)	1	0
Spillage of food material presenting sanitation risk (minor)	1	0
Incorrect discharge of waste	1	5
Inadequate storage of waste (major)	1	2
Inadequate storage of waste (minor)	0	7
Ship's declared pet/animal not managed as directed	0	2
Failure to keep ballast water records on board for two years	0	1
Failure to present Ship Sanitation Certificate	0	5
Failure to report previous carriage of high-risk cargo on pre-arrival report	0	1
Undeclared biosecurity risk material from crew leaving vessel	0	1
Total	**10**	**33**

Source: Department of Agriculture and Water Resources

More Australian than foreign naval vessels were inspected, but the rate of missed inspections for foreign naval vessels (18 per cent) was much higher than for Australian naval vessels (3 per cent) (Figure 3). A missed inspection is recorded when a vessel was due for a routine inspection but missed it because it either had only a brief time in port or was visiting an unstaffed port, or insufficient staff were available to carry out the inspection. Reasons for missed inspections are not recorded in MARS.

Foreign naval vessels also missed a greater proportion of scheduled inspections—indicating a lack of understanding of Australian biosecurity requirements by some foreign naval captains. Agriculture staff address this case by carrying out extra inspections on arrival.

FIGURE 3 Australian and foreign naval vessels, inspections and missed inspections, 2017

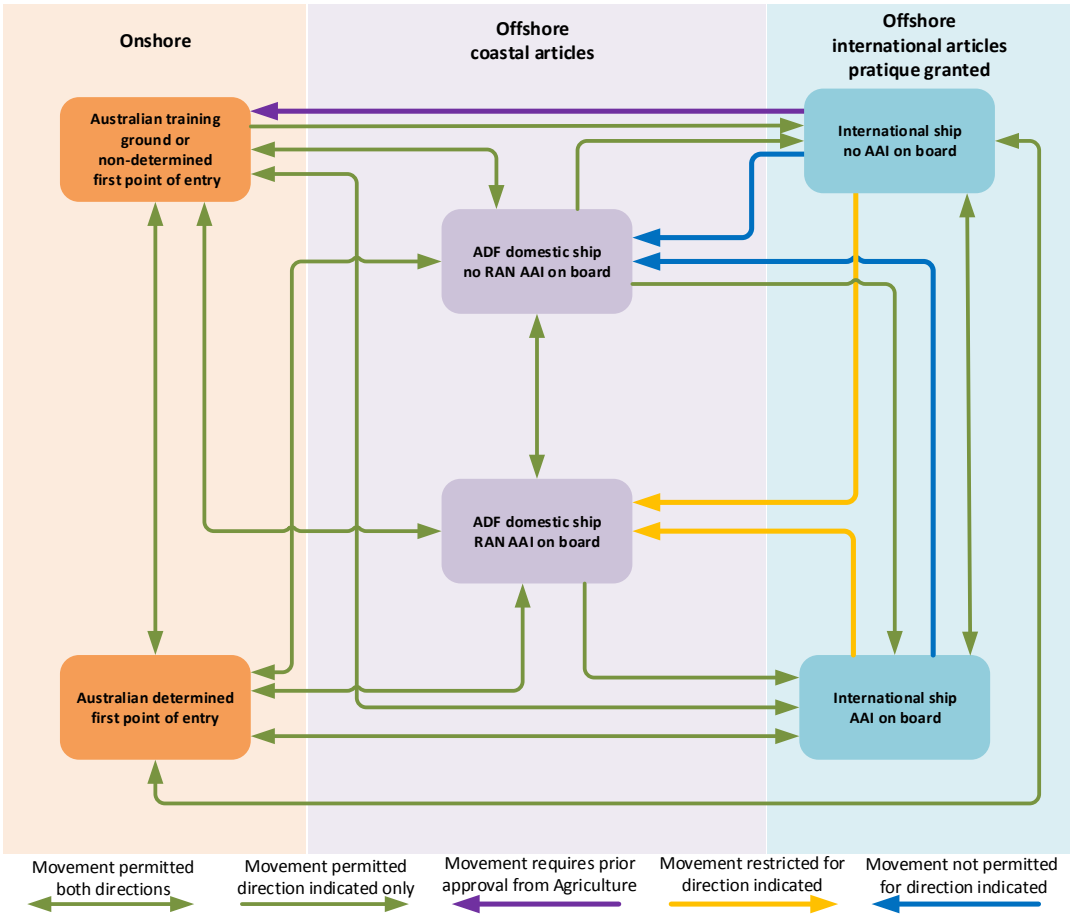


Source: Department of Agriculture and Water Resources

Ship-to-ship movements

Agriculture's Ship-to-Ship Movements Policy permits Agriculture-trained Royal Australian Navy (RAN) personnel, known as RAN Agriculture-approved Inspectors (RAN AAIs), to inspect low-risk ship-to-ship movements between RAN coastal vessels and international vessels to ensure they pose no biosecurity risks. Low-risk categories include military 'cross-decking' personnel (and their overnight bags) and military equipment spare parts. Movements can only be conducted through military helicopters or rigid hull inflatable boats and for replenishment at sea. Figure 4 shows ship-to-shore and ship-to-ship movements permissible under the Ship-to-Ship Movements Policy.

FIGURE 4 Permissible ship-to-shore and ship-to-ship movements



AAI Agriculture-approved inspector. **ADF** Australian Defence Force. **RAN** Royal Australian Navy.
Source: Department of Agriculture and Water Resources

4.5 Military cargo

Military aircraft, landing craft and specialised equipment are carried as cargo on larger aircraft and vessels. This cargo can carry seeds, soil and pests so Agriculture treats it in the same way as used farm equipment and other break bulk cargo and requires inspection of all cargo. Defence often take military helicopters and tilt-rotor aircraft offshore, deploying and redeploying them at short intervals—for example, to undertake peacekeeping and humanitarian work in Pacific countries. These aircraft can take off and land almost anywhere and pick up hitchhikers, contaminants and weed seeds, posing an increased biosecurity risk.

These risks can be minimised if the military clean their assets before entering Australian territory. Returning Australian and visiting foreign defence forces must ensure all items are clean and free from biosecurity risk material. The magnitude of this task at times is illustrated by the example below of measures taken in 2000–01 to ensure that no exotic pests returned with Australian forces from East Timor.

> 'Finding and cleaning every tiny grass seed from an M113 armoured personnel carrier sounds like a tough job. Cleaning the same seeds off 1,000 army vehicles—everything from trucks to front-end loaders and water tankers—is even tougher. Then cleaning off every trace of soil, every piece of foliage, insect and egg off 10,000 pallets of army equipment—everything from generators to tents and refrigerators—is stretching the limits of probability. But it had to be done in Dili, East Timor, before 5,000 Australian peacekeeping soldiers and all their vehicles and equipment could return to Australia.
>
> The likelihood of seeds and plant matter being spread by direct contact with military equipment is high. Weeds and seeds can spread as contaminants in soil stuck to vehicles, machinery, radiators, cuts in tyres, equipment, camouflage netting and personal equipment. Some seeds are light and windborne and are easily trapped in radiator grilles, equipment brackets and other small areas. Soil generally collects around wheels and tracks of vehicles but also on boots, personal equipment, clothing, tents, packaging boxes and tent poles.
>
> The job of checking that all the vehicles and the equipment (and the troops themselves) were not carrying pests and diseases into Australia fell to the Australian Quarantine and Inspection Service (AQIS). The job of cleaning all that equipment to AQIS standards fell to the Australian Defence Force.
>
> Captain Kevin Hall devised the washing and inspection procedures to comply with the AQIS quarantine requirements. He developed an illustrated 160-page manual, which became the bible for the major cleaning operation in Dili that had up to 300 staff operating 20 wash stations 18 hours every day for three months.
>
> This manual covers everything from how to clean soil out of the tyres of graders to where insects can lodge in an Unimog. It has photographs of all the Army vehicles and equipment with diagrams on how and where to clean them. It lists the equipment needs—from high-pressure water and air hoses to vacuum cleaners, brushes and even dustpans. All the necessary techniques were developed for the task and documented in the manual, which establishes guidelines that AQIS and the military could use not only for the East Timor operation, but also for future operations' (Wittenberg & Cock 2001).

Offshore inspections

Agriculture conducts offshore pre-shipment military goods inspections when biosecurity risks are better managed offshore, when they are otherwise in the national interest (including economic interest) or when goods or the movement of goods may have national security implications. Conducting offshore inspections can also enable Agriculture to better manage resources for high-volume operations. Australian or foreign defence forces preparing to bring a high volume of goods into Australia for a military exercise or when returning from an operation can apply to Agriculture to have it conduct an offshore pre-shipment inspection of the goods. Agriculture cost recovers expenses from the requesting defence force.

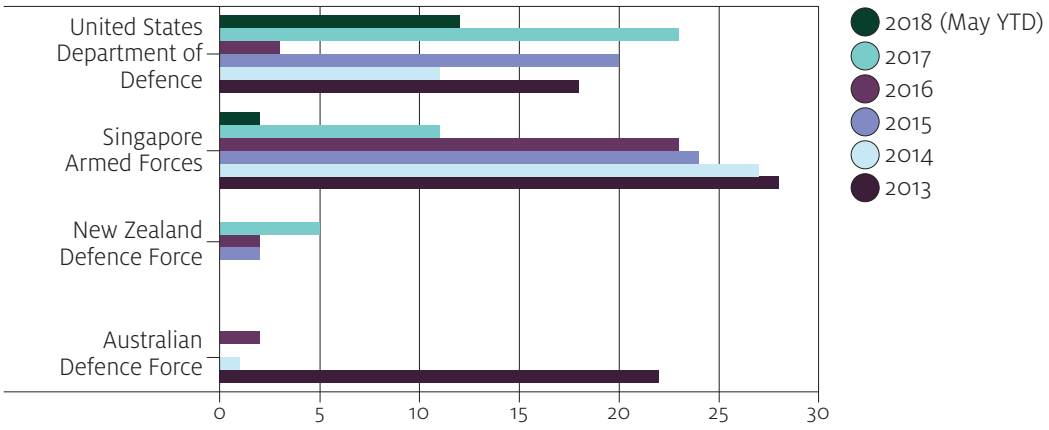
For approved requests, Agriculture deploys Australian biosecurity officers offshore to conduct full inspections of military equipment. Following inspection, the equipment must be securely stored and transported with controls in place to prevent re-contamination. It is then subject to verification inspection on arrival in Australia. This facilitates efficient clearance of goods in Australia and allows defence forces to access and use their equipment promptly.

Agriculture's Military Operations Team coordinates and manages offshore military inspections and liaises with relevant regional offices. The Military and Offshore Deployment Policy Team negotiates service level agreements with commercial clients and offshore arrangements with government clients. These may be between a commercial client acting on behalf of a foreign government (for example, the Singaporean military) or Agriculture and a foreign defence force.

For Exercise Talisman Sabre 2017, 27 biosecurity officers conducted offshore pre-shipment military inspections in 13 different locations across Japan, NZ, Philippines and the US. The offshore deployment spanned March to July and ran over 1,200 days.

Figure 5 shows the biosecurity workforce deployed for returning Australian military and foreign military offshore inspections between 2013 and 2018.

FIGURE 5 Australian biosecurity officers deployed for military offshore inspections, 2013–2018



Source: Department of Agriculture and Water Resources

Foreign forces showed their appreciation of Agriculture's role in Exercise Wallaby 2017:

> Agriculture's Inspection Services Group (ISG) received recognition for its role in successfully and efficiently managing biosecurity risks for the Singapore Armed Forces (SAF) military exercise—Wallaby 2017—where Singapore can exercise its forces in an extensive landscape, which it does not possess. During the exercise, ISG staff facilitated the importation of 5,000 military personnel, 280 military vehicles and 240 containers of military goods from Singapore into the central Queensland ports of Rockhampton and Gladstone. Agriculture's need to deploy offshore biosecurity officers before the exercise was greatly reduced due to their involvement in previous years in helping the Singaporeans understand and meet Australia's biosecurity requirements. The Singapore Armed Forces presented Agriculture with a plaque, in recognition of the experience, professionalism and commitment of all the biosecurity officers involved.
>
> (Department of Agriculture and Water Resources 2018).

Onshore inspections

Biosecurity officers inspect all Australian and foreign military aircraft and vessels at a first point of entry in Australia, unless the responsible government invokes sovereign immunity. For US sovereign-immune aircraft and vessels, Agriculture-approved inspectors (AAIs) inspect crew health status, vessel sanitation, stores and waste management. If AAIs find low-risk biosecurity material during inspection, they have the area cleaned and re-inspected or report the findings to Agriculture. AAIs report all high-risk material to Agriculture for direction on management.

Numbers of biosecurity officers at some military first points of entry are limited, sometimes leading to difficulties for Agriculture in sufficiently resourcing military inspections. For example, in 2016 Defence humanitarian forces returned to Australia from Operation Fiji Assist. At Defence's request, Agriculture deployed two biosecurity officers to Fiji to conduct offshore inspections of personnel kit (to avoid personnel being held up on arrival). Defence advised Agriculture that personnel and equipment would be returned to Australia through Brisbane. However, it returned some personnel and cargo through Townsville and did not advise Agriculture soon enough to allow it to ensure adequate numbers of biosecurity officers were available. This resulted in delays at Townsville. Most cargo was returned via Brisbane, which was adequately resourced by Agriculture. Defence should engage Agriculture early in the planning process to ensure it can provide extra biosecurity officers where needed.

Agriculture must be able to continue to maintain a significant and appropriately trained workforce so it can cater for heightened demands ahead of major military exercises and provide adequate numbers of inspectors at different locations around Australia and offshore without compromising other biosecurity functions. Most of Agriculture's biosecurity risk management activities are cost-recovered, and it should seek government approval to exempt these from efficiency dividends and staff caps.

Recommendation 2

The department should continue to ensure that provision of adequately trained biosecurity officers for offshore and onshore activities ahead of and during combined military activities in Australia does not compromise other essential biosecurity functions.

Department's response: Agreed.

The department is continuing to strengthen workforce resource prioritisation processes to biosecurity officer allocation for offshore and onshore activities and to ensure that offshore activities do not compromise essential biosecurity functions.

Recommendation 3

The department should continue to ensure it has adequate long-term funding to manage military biosecurity risk. It should make the case to government to ensure its:

- resourcing is linked to growth in military activities and biosecurity risks
- cost-recovered functions are exempt from efficiency dividends and staff caps.

Department's response: Agreed.

The department will continue to advise government of the resourcing required to deliver all functions, including military biosecurity risk management.
The department will work within the Budget rules as required and will make representations to government as to the application of those rules as appropriate.

4.6 Approved arrangements

Under section 406 of the *Biosecurity Act 2015*, biosecurity industry participants can voluntarily enter into legally binding approved arrangements with Agriculture (see Department of Agriculture and Water Resources 2017). Approved arrangements allow operators to manage biosecurity risks and/or undertake the documentary assessment of goods in accordance with Agriculture's requirements—using their own premises, facilities, equipment and people without constant supervision by Agriculture but with periodic compliance monitoring or auditing. Applicants must prove they can meet Agriculture's requirements, including passing an integrity or 'fit-and-proper-person' test.

For Defence it is more practical to have biosecurity clearance functions carried out on its bases. Military goods identified as presenting a biosecurity risk may need to be directed to a site with an approved arrangement for dismantling, cleaning and/or treatment before they are re-inspected. If the approved arrangement site is away from the military base, inspection may be delayed due to availability of accredited inspectors at an approved arrangement site. Also, Defence may have to compete with commercial importers to have its goods cleared and will incur additional costs imposed by the approved arrangement site (not Agriculture).

Defence cannot enter into an approved arrangement with Agriculture, since two non-corporate Commonwealth entities (such as Defence and Agriculture) cannot enter into legally binding arrangements because they are part of a single body—the Commonwealth. Therefore, the Director of Biosecurity cannot approve a proposed approved arrangement between Defence and Agriculture. Also, Defence (as an entity, not an individual) could not meet the requirements of a 'fit-and-proper-person' test.

However, biosecurity-related facilities managed by Defence should as far as possible be subject to the same requirements, verification measures and compliance monitoring or auditing as other comparable approved arrangement sites to ensure consistency and adequate biosecurity risk management.

Under the superseded *Quarantine Act 1908*, Agriculture had approved eight quarantine approved premises on Defence sites and two disinsection arrangements with Defence (Table 5). Defence has continued to run these as approved arrangements consistent with the *Biosecurity Act 2015*, but this is not their legal status.

In 2010 RAAF Base Amberley Defence officers constructed a wash bay to clean Defence equipment and improve the efficiency of their local cleaning process, but did not apply for this to be approved for biosecurity purposes at that time. During a visit to Amberley in April 2018 the IGB noted that it would be operationally convenient for this wash bay to be formalised as an approved arrangement. However, this was not deemed possible due to the lack of an appropriate legal mechanism. An appropriate legal framework should be established to enable Agriculture, at Defence's request, to assess and approve relevant wash bays and other facilities once they meet biosecurity standards.

Agriculture and Defence should agree on which biosecurity activities Defence will undertake on Agriculture's behalf and include this agreement as a schedule to the existing memorandum of understanding (MoU). Agriculture should also consider including Defence's Approved Arrangement sites as approved arrangements in this schedule.

TABLE 5 Approved arrangements held by Defence, Australia, 2018

AA class	AA classification	Base location	Purpose
2.1 and 99	Non-agricultural products and customised arrangement	Townsville, Queensland	Sites for deconsolidating, holding, inspecting and treating military air and sea cargo and vehicles; wash pads for cleaning machinery; facilities for cleaning helicopters
5.2	Biosecurity containment level 2	Tullamarine, Victoria (two sites)	Premises for research, analysis and/or testing of imported biological material, and holding and containment of terrestrial arthropods
5.3	Biosecurity containment level 3	Brisbane, Queensland Tullamarine, Victoria	Premises for research, analysis and/or testing of imported biological material, and holding and containment of terrestrial arthropods
7.2	Biosecurity insectary containment level 2	Brisbane, Queensland	Premises for research, analysis and/or testing of imported biological material, and holding and containment of terrestrial arthropods
7.8	Defence and police dogs	Fremantle, Western Australia Mascot, New South Wales	Premises for military working dogs to undergo post-entry quarantine on return to Australia
43.1	Disinsection treatment	Botany Bay, New South Wales Brisbane, Queensland	Disinsection arrangements for Royal Australian Air Force aircraft

AA Approved arrangements.
Source: Department of Agriculture and Water Resources

Recommendation 4

The department and the Department of Defence should add a schedule to their memorandum of understanding to enable Defence to undertake biosecurity activities in ways that are consistent with requirements for other third-party approved arrangements.

Department's response: Agreed.

The department has commenced drafting a new schedule to the Memorandum of Understanding to allow Defence to undertake such biosecurity activities.

4.7 Other biosecurity risks

The *Defence logistics manual* biosecurity chapter (Department of Defence 2016) provides comprehensive instructions for Defence officers on meeting Agriculture's requirements for managing biosecurity risks.

Explosive ordnance

Explosive ordnance cargo includes military explosive ordnance and explosives for mining and other civilian purposes. These shipments must be handled carefully. Agriculture works with suppliers of explosives and Defence to address biosecurity issues and develop management plans to address potential biosecurity issues before shipment where possible.

Most explosives are imported to Australia via the remote Port Alma (100 kilometres north of the Port of Gladstone, Queensland). Agriculture biosecurity officers and Queensland Mines Inspectorate officers inspect incoming consignments together to streamline inspection processes. Explosives from consignments found to contain hitchhiker pests are wrapped in plastic and transported to the even more remote fumigation facility at Bajool (40 kilometres west of Port Alma). The Bajool facility is not an approved arrangement site and is only used, with permission from Agriculture, for fumigation and reinspection after fumigation.

Defence is upgrading its explosive ordnance importation facility at Point Wilson (at the western end of Port Phillip Bay, approximately 50 kilometres south-west of Melbourne) to include an approved facility for on-site biosecurity inspection and fumigation of explosive ordnance. This will ease logistical problems at Port Alma.

Defence personnel and their baggage

Defence personnel and their baggage entering Australia by air or ship are subject to the same biosecurity clearance procedures as other incoming passengers and baggage. Agriculture provides Defence with services such as offshore clearing of personnel kits at their request (for biosecurity or national security reasons).

Military working dogs

Defence must ensure military working dogs returning to Australia receive vaccinations before export according to Agriculture's requirements. Each dog must also have an import permit and spend at least 10 days at the Agriculture post-entry quarantine facility in Mickleham, Melbourne, or at an approved arrangement site in Mascot, New South Wales, or Fremantle, Western Australia.

Foreign military working dogs must meet the import conditions for companion dogs. These include being imported by air directly to Melbourne for post-entry quarantine at Mickleham only (not at any other approved arrangement site).

Other animals and animal products

Consistent with import requirements listed in BICON, Agriculture either does not permit or requires an import permit for Defence imports of living animals; unprocessed animal parts; or meat, eggs or milk products.

Foods and food waste

Agriculture imposes biosecurity controls on foods and food waste to be unloaded in Australia from military aircraft or vessels. It permits re-entry of unopened and uncontaminated Australian ration packs or ready-to-eat meals.

Human remains

Human remains imported by Defence for cremation or burial must be prepared beforehand to minimise biosecurity risk. Under the *Biosecurity Act 2015*, an import permit is not required for human remains provided:

- the cause of death is known
- they are in a hermetically sealed container
- infection control procedures are followed, including use of personal protective equipment.

Biosecurity officers at the first point of entry should be notified at least 48 hours before expected arrival.

4.8 Recording and reporting non-compliance

Agriculture biosecurity officers conduct verification inspections onshore for all military goods, conveyances and personnel (apart from those from sovereign-immune vessels entering Australian training grounds) before they are released. They record vessel non-compliances in MARS and all others in Agriculture's Incidents Database. Agriculture's Military Operations Team uses regional office data to maintain a register of military non-compliance and provides this to Defence as required. Serious non-compliances are escalated through Agriculture's Military Policy Team to Defence's Strategic Logistics Branch for resolution.

Between 2012 and 2017 Agriculture recorded 69 military non-compliances—mostly animal, insect or seed detections. It detected more via the sea pathway (58) than the air pathway (11), and more on foreign military conveyances than Australian military conveyances. For example, seven insects were detected in a single vehicle inspected offshore for Talisman Sabre 2015. A cat was found aboard a tricon container on an aircraft, and four seed detections were recorded.

4.9 Biosecurity surveillance at military bases

Agriculture conducts surveillance around first points of entry, including military bases, for early detection of harmful exotic pests and diseases that might breach border defences and establish in Australia. Biosecurity officers routinely monitor for invasive vector mosquitoes (Inspector-General of Biosecurity 2017). Agriculture and Defence personnel at all levels and on military bases have good working relationships. However, vector-monitoring practices vary across military bases. At military airfields co-located with commercial airports, such as in Darwin, Agriculture staff monitor for invasive vector mosquitoes but on other bases trained military personnel or third-party operators perform this role. Agriculture and Defence should implement a consistent approach to managing this important program.

In November 2016 Agriculture implemented its National Border Surveillance Program, stationing surveillance officers at first points of entry (sea ports and airports), including military bases, and approved arrangement sites. The officers set and manage pest traps and take samples and photos of plants and insects for identification. Any exotic pests and weeds found can then be managed appropriately.

In March 2018 a single browsing ant was trapped at RAAF Base Pearce, Western Australia. Browsing ants are abundant in Timor-Leste and Malaysia. They can become a major environmental pest because they form super-colonies that overwhelm local ecosystems. Agriculture worked closely with the RAAF and local ant experts on further surveillance and treatment at the site—to manage the immediate risk of spread and carry out delimiting surveys. The RAAF supported these on-base activities by assisting with site access, limiting movement in defined areas and completing additional surveillance and baiting activities.

This detection is an example of the risks posed by military bases and the value of regular surveillance. In this case, response management was well handled. However, for future cases Agriculture should clearly articulate its expectations of roles and responsibilities at Defence sites. The Agriculture–Defence MoU currently provides for the management of goods and conveyances but does not cover surveillance or responses to detections on Defence sites. It should include a requirement for Defence to appropriately resource on-base biosecurity risk management activities, including any treatment, trapping or long-term surveillance needed for eradication and proof of freedom.

Defence recognises and manages site biosecurity and pest invasion risks through its *National planning guidelines for the management of biosecurity and overabundant native species on the Defence estate*. Defence was updating the manual at the time of publishing this report. Agriculture should have input into the biosecurity aspects of this manual.

Recommendation 5

The department and the Department of Defence should modify their memorandum of understanding to define roles and responsibilities for biosecurity surveillance and prescribed pest management responses on Defence sites. This should include stakeholder communication and funding arrangements.

Department's response: Agreed.

As part of its recent announcement of $313 million in additional biosecurity measures, the Australian Government announced:

- $1 million a year on-going to support the department's ability to respond to biosecurity incidents in areas of Commonwealth responsibility
- additional resources to develop plans for high risk Commonwealth places and develop staff capability to manage responses to pest or disease incursions on Commonwealth places.

The department is also currently developing policies in relation to managing responses to biosecurity incidents on Commonwealth places (including Department of Defence sites). This policy development will include consultation with the Department of Defence and consideration of any required amendments to the MoU with the Department of Defence, to reflect and clearly articulate the roles and responsibilities of each party for biosecurity surveillance and pest management responses on Defence sites.

Conclusion

The Australian Government Department of Agriculture and Water Resources (Agriculture) and the Department of Defence (Defence) are cooperating well to manage the biosecurity risks of Australian and foreign military movements into Australia. Measures are well planned and well implemented. The Agriculture–Defence memorandum of understanding (MoU) clearly sets out roles and responsibilities and a governance structure. It provides for training, communication and verification activities to ensure commitment to and implementation of Australia's biosecurity requirements by Australian and foreign defence forces.

Agriculture regularly attends military planning conferences ahead of major exercises and delivers presentations to improve awareness of Australia's biosecurity requirements. It also trains US military and US Department of Agriculture staff in Australian biosecurity inspection requirements. These staff are accredited as 'Agriculture-approved inspectors' and can inspect US sovereign-immune aircraft and goods—previously inspected offshore by Australian biosecurity officers—entering Australian training grounds from US sovereign-immune vessels.

However, the movement of Australian and foreign military assets and personnel into Australia will continue to pose biosecurity risks and ongoing training will be required for both Australian and foreign forces. The recommendations in this report are intended to complement actions that both agencies are already taking to identify and address current and future biosecurity challenges.

Agriculture commits significant resources to coordinating biosecurity inspection teams at several locations around Australia and offshore. Co-location of biosecurity staff on busy Defence sites such as RAAF Base Amberley would facilitate more timely and efficient delivery of biosecurity services.

Agriculture must be resourced sufficiently to enable it to continue to maintain an ongoing and appropriately trained workforce capable of meeting increased biosecurity inspection demands ahead of major military exercises—onshore and offshore. It should seek a government commitment to ensuring adequate long-term funding for biosecurity risk management. Funding should be linked to growth in military activities and biosecurity risks, and cost-recovered functions (including inspection activities) should be exempt from efficiency dividends and staff caps.

Agriculture and Defence should modify their MoU to allow Defence to undertake approved biosecurity activities in line with requirements for other third-party approved arrangement sites. The MoU should also define Agriculture and Defence roles in surveillance for exotic pests on Defence sites and responses following any detection.

These measures will allow Agriculture and Defence to ensure that military movements into Australia do not compromise Australia's favourable biosecurity status.

Appendix A
Agency response

Australian Government
Department of Agriculture and Water Resources

ACTING SECRETARY

Ref: EC18-000309

Dr Helen Scott-Orr PSM
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Dear Dr Scott-Orr

Thank you for your letter of 4 July 2018 about your review report, *Military biosecurity risk management in Australia*, and the opportunity to provide a response to your findings and recommendations.

The department agrees with the recommendations in the report. I am pleased to inform you that work towards addressing some of the recommendations has already commenced.

Specific comments in response to the recommendations are provided at Annex A. There are no matters referenced in your report that are considered prejudicial to the public interest and therefore should not be made publically available.

If you require any further clarification on our comments, please contact Mr Dean Merrilees, Assistant Secretary, Compliance Controls on 02 6272 3901, or by email to dean.merrilees@agriculture.gov.au.

Yours sincerely

Cindy Briscoe

26 July 2018

ANNEX A

Department of Agriculture and Water Resources responses to recommendations

Recommendation 1

The department should negotiate with the Department of Defence to permanently station at least one biosecurity officer at RAAF Base Amberley for more efficient service provision.

Response:

Agreed.

The department will work collaboratively with the Department of Defence to provide more efficient biosecurity inspection activities at RAAF Base Amberley. It is expected that the biosecurity officer stationed at RAAF Base Amberley will also undertake a range of cost recovered inspection activities in the Ipswich and greater area of Brisbane.

Recommendation 2

The department should continue to ensure that provision of adequately trained biosecurity officers for offshore and onshore activities ahead of and during combined military activities in Australia does not compromise other essential biosecurity functions.

Response:

Agreed.

The department is continuing to strengthen workforce resource prioritisation processes to biosecurity officer allocation for offshore and onshore activities and to ensure that offshore activities do not compromise essential biosecurity functions.

Recommendation 3

The department should continue to ensure adequate long-term funding for military biosecurity risk management, making the case to government for resourcing to be linked to growth in military activities and biosecurity risks, with cost-recovered functions exempt from efficiency dividends and staff ceilings.

***Response*:**

Agreed.

The department will continue to advise government of the resourcing required to deliver all functions, including military biosecurity risk management. The department will work within the Budget rules as required and will make representations to government as to the application of those rules as appropriate.

Recommendation 4

The department should work collaboratively with the Department of Defence to add a schedule to the existing Memorandum of Understanding to allow Defence to undertake approved biosecurity activities, in line with requirements for other third party approved arrangements.

***Response*:**

Agreed.

The department has commenced drafting a new schedule to the Memorandum of Understanding to allow Defence to undertake such biosecurity activities.

Recommendation 5

The existing MoU between Agriculture and Defence should be modified to define roles and responsibilities for biosecurity surveillance and prescribed pest management responses on Defence sites, including stakeholder communication and funding arrangements.

Response:

Agreed.

As part of its recent announcement of $313 million in additional biosecurity measures, the Australian Government announced:

- $1 million a year on-going to support the department's ability to respond to biosecurity incidents in areas of Commonwealth responsibility
- additional resources to develop plans for high risk Commonwealth places and develop staff capability to manage responses to pest or disease incursions on Commonwealth places.

The department is also currently developing policies in relation to managing responses to biosecurity incidents on Commonwealth places (including Department of Defence sites). This policy development will include consultation with the Department of Defence and consideration of any required amendments to the MoU with the Department of Defence, to reflect and clearly articulate the roles and responsibilities of each party for biosecurity surveillance and pest management responses on Defence sites.

References

Department of Agriculture and Water Resources 2017, Approved arrangements, Canberra, accessed 5 June 2018.

— —2018, 'Job well done for Exercise Wallaby 2017' [intranet content], *AgMag 2018*, 24 April.

Department of Defence 2016, Defence Logistics Manual, Canberra, accessed 28 June 2018.

Inspector-General of Biosecurity 2017, A review of Department of Agriculture and Water Resources' management of biosecurity risks posed by invasive vector mosquitoes, especially *Aedes* spp., entering or establishing in Australia, Canberra.

— —2018, Hitchhiker pest and contaminant biosecurity risk management in Australia, Canberra.

Hulme, PE 2007, 'Biological invasions in Europe: drivers, pressures, states, impacts and responses', in R Hester and RM Harrison (eds.), *Biodiversity under threat*. Cambridge University Press, Cambridge, p. 61.

Teruya, T, Araki, Y & Osada, M 1973, '*Erionota torus*, a new insect pest of banana plant', in Ruiz, GM & Carlton, JT (eds) 2003, *Invasive species: vectors and management strategies*, Island Press, Washington, DC, pp 17–19.

Wittenberg, R & Cock, MJW (eds) 2001, *Invasive alien species: a toolkit of best prevention and management practices*, CAB International, Oxon, United Kingdom.