



Chapter 4

Pre-border and border biosecurity



Pre-border and border biosecurity

Australia benefits from importing a range of goods and produce from overseas. Imports provide access to a wide range of products, technology and services that enable economic growth in multiple sectors. While Australians consume mostly local products, the food that is imported is commonly produce that is out of season in the southern hemisphere.

The movement of plant produce and other goods around the world poses biosecurity risks to the importing countries. In an effort to mitigate risk, the Australian Government performs a number of activities pre-border and at the border to safeguard our biosecurity status.

The Department of Agriculture and Water Resources has primary responsibility for pre-border and border biosecurity activities. These focus on minimising the likelihood of exotic pests and diseases reaching our border or arriving through the movement of people and goods into Australia. They provide assurance to the community and producers about the biosecurity status of commodities imported into Australia.

The Australian Government's efforts to support exports is covered in this chapter. International trade is important to Australia in a global economy. Australia gains significant economic benefits as a net exporter of agricultural products, with around two-thirds of agricultural production exported to overseas markets. The amount of exported product varies between industries, with some such as the grains and cotton industries exporting much of the produce grown, and others gradually increasing exports, such as the horticulture industry.



Grain loading facilities such as this one in Newcastle allow export to overseas markets

Pre-border biosecurity

OBLIGATIONS UNDER INTERNATIONAL TRADE AGREEMENTS

Trade is covered by international agreements, known as phytosanitary agreements, that aim to prevent the spread of plant pests.

As an active trading nation, Australia has entered into multilateral and bilateral trade agreements that influence the plant biosecurity system. Biosecurity risks are managed in keeping with Australia's legislative framework for biosecurity and international obligations.

On a multilateral level, Australia's rights and obligations in relation to plant biosecurity are set out under World Trade Organization agreements, particularly the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement), although others, such as the General Agreement on Tariffs and Trade 1994, may apply in certain circumstances.

The SPS Agreement provides World Trade Organization member countries with the right to use sanitary and phytosanitary measures to protect human, animal and plant life or health. The agreement also imposes obligations, including that sanitary and phytosanitary measures cannot be used to inhibit trade where there is no danger to human, animal or plant health.

Members can specify the level of protection that they consider fitting to protect human, animal and plant life or health within their territory. This is known as the appropriate level of protection (ALOP) or acceptable level of risk provided it is science-based, is applied consistently and considers the objective of minimising negative trade effects. Australia's ALOP is defined in section 5 of the *Biosecurity Act 2015* as providing "a high level of sanitary and phytosanitary protection aimed at reducing biosecurity risk to a very low level, but not to zero".

All Australian state and territory governments have agreed to this statement as the basis for the national biosecurity system. Consistent with these requirements, Australia's policy is to reduce biosecurity risk to this level by using science-based risk assessments.

Australia has a number of bilateral free trade agreements with other countries, each of which deals with biosecurity issues in a slightly different way. However, all agreements are consistent with the SPS Agreement and Australia does not negotiate on specific biosecurity measures within its free trade agreements.

There are also multilateral agreements on plant protection, to which Australia is a party, that outline the responsibilities and obligations to members. These agreements also set standards to help harmonise phytosanitary (plant health) measures.

The International Plant Protection Convention

The **International Plant Protection Convention** (IPPC) was established to protect the world's plant resources from the spread of serious pests by international trade, including diseases and invasive species. The IPPC is an Article XIV statutory body of the Food and Agriculture Organization (FAO) of the United Nations, from which it receives program funding, sourced from FAO assessed contributions and donations and supplemented by voluntary contributions of contracting parties.

The IPPC is recognised by the SPS Agreement as the body responsible for the establishment of phytosanitary standards relating to plants and plant products in international trade, as well as to anything that can act as a vector for the spread of plant pests.

These standards, known as International Standards for Phytosanitary Measures (ISPMs), set specific requirements for the management of biosecurity issues, such as the development of pest risk analyses or guidelines for surveillance. Importantly, these standards are a means by which governments can harmonise their phytosanitary regulations. The standards not only reduce the number of pests moved through international trade, but also help facilitate safe trade. Australia, through the Department of Agriculture And Water Resources, coordinates and provides input into four governance bodies:

- Commission on Phytosanitary Measures, the governing body that oversees implementation of the IPPC
- IPPC Strategic Planning Group, which determines strategic priorities for IPPC activities
- IPPC Standards Committee and associated working groups responsible for the development of ISPMs
- IPPC Implementation and Capacity Development Committee responsible for facilitating implementation of the convention and its standards and recommendations.

Australia has contributed a number of technical resources to help other contracting parties better manage phytosanitary risks, including guidance on managing risks posed by sea containers and internet trade of plants and plant products. Australia has also taken a lead role in the development and implementation of the electronic generation and transmission of phytosanitary certification through the IPPC ePhyto program. Reporting and exchange of information, including pest status of parties, is available on the International Phytosanitary Portal at ippc.int

Australia's membership of these IPPC bodies provides an important avenue for the Department of Agriculture and Water Resources to raise and address plant health matters in regard to international trade. The department consults with peak industry groups and state and territory governments to determine Australia's position on items for the IPPC agenda.

The Plant Protection Agreement for the Asia and Pacific region

The Plant Protection Agreement is an intergovernmental treaty administered by the Asia and Pacific Plant Protection Commission (APPPC), a Regional Plant Protection Organisation (RPPPO) recognised under the IPPC. The APPPC covers phytosanitary issues relating to the movement of pests in trade, pesticide use and regulation, and integrated pest management.

Through its Standards Committee, the APPPC develops Regional Standards for Phytosanitary Measures that deal with specific regional issues, support the region's trade and may form the basis of an international standard. Australia is an active participant in the APPPC assisting with the development of standards and their implementation in the region.

Australia is involved in the following APPPC committees and regional working groups:

- Chair and member of the APPPC Standards Committee.
- Chair of the APPPC ePhyto Working Group.

Australia is also involved in leading a series of APPPC workshops over six years (2016–22) on surveillance management, methodologies and analysis.

Workshops on irradiation as a phytosanitary measure and risk categorisation and mitigation for semi processed products under ISPM 32 are planned for 2019.

These opportunities allow Australia to enhance its plant health engagement with the 28 member countries of the APPPC. This strengthens regional plant health and biosecurity capacity and implementation of international plant health standards.

Canberra Agreement

Australia is also a member of a second Regional Plant Protection Body, the Pacific Plant Protection Organisation (PPPO), which is an auxiliary body established under the then South Pacific Commission of the Canberra Agreement. The PPPO provides advice and support to its members on phytosanitary measures to facilitate international trade whilst protecting the plant health status of parties. The Pacific region covers Pacific island countries, the United States, French territories, Australia and New Zealand.

In 2018, the PPPO hosted its triennial meeting and an IPPC regional workshop to consider draft ISPMs and other IPPC activities. These meetings were funded by the Department of Agriculture and Water Resources. Australia is a member of the PPPO Executive Committee.

PRE-BORDER ACTIVITIES TO MITIGATE THE RISKS OF IMPORTS

The Department of Agriculture and Water Resources has primary responsibility for pre-border activities to mitigate the risk of exotic pests and diseases reaching our border or arriving through the movement of people and goods into Australia. The department also provides assurance to the community and producers about the biosecurity status of imported commodities.

Pre-border activities include:

- regulating imports to manage risks
- assessing import risks
- conducting risk assessments to consider the level of biosecurity risk that may be associated with imports and imposing relevant risk management measures
- biosecurity risk analyses
- conducting pre-border verifications, inspections and audits on imports
- conducting pest and disease surveillance in neighbouring countries
- participating in international plant health agreements
- collaborating with international partners on multilateral or bilateral plant health issues and the development of standards
- building regional capacity through collaborative activities
- gathering intelligence to determine and address emerging biosecurity risks
- negotiating market access for Australian exports
- maintaining the Biosecurity Import Conditions database (BICON).

REGULATING IMPORTS TO MANAGE RISK

Since imported plant products could bring exotic pests into the country, the importation of plants and plant products into Australia is strictly regulated. The Australian Government has responsibility for regulation under the *Biosecurity Act 2015*, the *Environment Protection and Biodiversity Conservation Act 1999*, and where relevant, the *Gene Technology Act 2000* and any subordinate legislation.

Import conditions are imposed to ensure that goods entering the country do not introduce new pests and diseases to Australia. Import conditions are determined on a case-by-case basis, depending on the pest risks associated with the product, the location of production and the shipping arrangements. The Department of Agriculture and Water Resources verifies that imported goods meet these conditions and compliant goods are allowed entry.

Some imported goods require an import permit and these are issued under the *Biosecurity Act 2015*. Other goods may be allowed entry without a permit subject to standard conditions that are included in the *Biosecurity (Prohibited and Conditionally Non-prohibited Goods) Determination 2016*. Permits may also be required under the *Environment Protection and Biodiversity Conservation Act 1999* for imports of internationally endangered species designated by CITES, the Convention on International Trade in Endangered Species of Wild Fauna and Flora, and live specimens.

In establishing import conditions, Australia must be confident that the required risk management measures are properly implemented and can be maintained. Pre-border site visits or audits may be required.

Assessing import risks

Import risk assessment is an important part of Australia's biosecurity protection. Assessments consider the level of biosecurity risk that may be associated with imports and impose relevant risk management measures.

Assessments are conducted by technical and scientific experts and can take several forms, such as import risk analyses (IRAs), pest risk assessments and policy reviews. IRAs have a timeframe for completion which is regulated by legislation and the process includes mandated public consultation periods and a formal appeal process.

Assessments are conducted in accordance with Australia's rights and obligations under the SPS Agreement and following the guidance of relevant international standards including ISPM 2 (Framework for Pest Risk Analysis) and ISPM 11 (Pest Risk Analysis for Quarantine Pests) of the IPPC.

Table 46 details policy advice finalised by December 2018, as well as draft policy advice that is currently in progress.

Biosecurity risk analyses conducted by the Department of Agriculture and Water Resources staff are consistent with Australia's international biosecurity obligations to establish a balance between our international trade obligations and risks posed by goods.

A Biosecurity Import Risk Analysis (BIRA), under the *Biosecurity Act 2015* may be conducted where relevant risk management measures have not been established, or where they exist for a similar product and pest or disease combination, but the likelihood or consequences of entry, establishment or spread of pests or diseases could differ significantly from those previously assessed.

Regulated risk analyses conducted before 16 June 2016 were completed under the *Quarantine Act 1908* and were called an Import Risk Analysis.

The department is responsible for conducting each BIRA as well as other risk analyses but the process can involve other stakeholders including:

- departmental officers with expertise in science and regulation, pests and diseases, commercial processes or other relevant disciplines
- a Scientific Advisory Group, comprising external scientific and economic experts
- a BIRA Liaison Officer, acting as the first point of contact for stakeholders during a BIRA
- other external experts, government agencies and domestic and international stakeholders.

A review of existing biosecurity measures can be done when there is a change in biosecurity risk, and when there are technological advancements or process improvements that remove or minimise the biosecurity risk associated with a particular commodity.

These 'non-regulated' risk reviews are often driven by industry requests and usually result in more treatment options that importers can undertake to meet biosecurity requirements.

Similar methodology can be used to conduct a scientific review of existing policy, with specific adjustments and modifications to methods being explained in the individual reports.

Pre-border verifications, inspections and audits on imports

A range of verifications, inspections and audits are undertaken offshore to manage risks prior to import into Australia to ensure that exporting countries can meet Australia's biosecurity requirements, to provide export systems for safe trade and prevent the arrival of non-compliant consignments at the border.

Regular verifications and audits are undertaken to ensure compliance of specified plant material with prescribed risk management procedures. Controls also extend to production areas and stock feed processing facilities.

The Australian Government works with national plant protection organisations in exporting countries to increase confidence in their systems' ability to effectively manage biosecurity risks pre-border. This reduces the pressure on mitigating risks at the border and provides opportunities to reduce post-border intervention.

Table 46. Australian Government import policy advice, final and in progress¹⁶

Policy	Country (from)	Year released
Finalised policy advice		
Apple and pear (budwood)	Generic	2002
Apples	New Zealand	2007
Apples	China	2010
Apples	New Zealand (review)	2011
Apples (Fuji)	Japan	1998
Avocado (revision)	New Zealand	2007
<i>Baeodromus eupatorii</i> for the biological control of the weed <i>Ageratina adenophora</i>	Source country	2014
Bananas	Philippines	2009
<i>Candidatus</i> Liberibacter psyllauros (capsicum, nursery stock, potato tubers, tamarillo fruit, tomato)	New Zealand, USA	2009
<i>Candidatus</i> Liberibacter spp. and their vectors associated with Rutaceae	All countries	2011
<i>Candidatus</i> Liberibacter solanacearum (apiaceous crops, including carrot and celery)	All countries	2017
Capsicum	Korea	2009
Cherries (into Western Australia)	New Zealand	2003
Citrus	Egypt	2002
Citrus (revision)	Israel	2003
<i>Cucumber green mottle mosaic virus</i> pest risk analysis (host cucurbit seeds)	All countries	2017
<i>Dactylopius tomentosus</i> (fulgida) for the biological control of coral cactus <i>Cylindropuntia fulgida</i> var. <i>mamillata</i>	All countries	2015
Dragon fruit	Indonesia	2018
Dragon fruit	Vietnam	2017
<i>Drosophila suzukii</i> (spotted wing drosophila)	All countries	2013
Durian	Thailand	1999
Durian (supplement)	Thailand	2000

Policy	Country (from)	Year released
Finalised policy advice (continued)		
<i>Eueupithecia cisplatensis</i> for the biological control of Parkinsonia, <i>Parkinsonia aculeata</i>	Source country	2012
<i>Eueupithecia</i> sp. 2 for the biological control of the weed <i>Parkinsonia aculeata</i>	Source country	2014
Fresh ginger	Fiji	2015
Ginger	Fiji	2013
Grains	Various	2006, 2007, 2008
Grapes (table)	India	2016
Grapes (table)	USA	2002
Grapes (table)	Chile	2005
Grapes (table)	Korea	2011
Grapes (table)	China	2011
Grapes (table)	Japan	2014
Grapes (table, revisions)	USA	2003, 2006
Grapes (table)	Sonora, Mexico	2016
Grapes (table, into Western Australia)	USA	2016
Grapevine propagative materials	All countries	2013
Hazelnut	Chile	2011
Hops propagative materials	All countries	2010
Island cabbage	Cook Islands, Fiji, Samoa, Tonga, Vanuatu	2013
Lentil (seed and human consumption)	All countries	2002
Lettuce (reinstatement)	New Zealand	2007
<i>Lilium</i> spp.	Taiwan	2013
Limes	Cook Islands, Niue, Samoa, Tonga, Vanuatu	2018
Limes (Tahitian)	New Caledonia	2006
Lychee	Taiwan, Vietnam	2013
Lychee and longan	China, Thailand	2004
Maize (bulk)	USA	2003

16. Australian Government Department of Agriculture and Water Resources. Plant risk analyses. Accessed online 16 July 2019 agriculture.gov.au/biosecurity/risk-analysis/plant

Table 46. Australian Government import policy advice, final and in progress (continued)

Policy	Country (from)	Year released
Finalised policy advice (continued)		
Mandarin (Unshu)	Japan	2009
Mangoes	Philippines	1999
Mangoes	Taiwan	2006
Mangoes	India	2008
Mangoes	Philippines (additional areas)	2010
Mangoes (revisions)	India	2011
Mangoes	Pakistan	2011
Mangoes	Indonesia, Thailand, Vietnam	2015
Mangosteen	Thailand	2004
Mangosteen	Indonesia	2012
<i>Mastrus ridens</i> for the biological control of codling moth, <i>Cydia pomonella</i>	Source country	2013
Nectarines	China	2016
Olive (plants from approved sources)	Generic	2003
Oranges (sweet)	Italy	2005
Papaya	Fiji	2002
Peaches, plums and apricots (extention to nectarine IRA)	China	2017
Pears	Korea	1999
Pears	China	2005
Pears (Asian)	China	2003
Pears (Ya)	China	1998
Permitted seeds	All countries	2006
Persimmon	Israel, Japan, Korea	2004
<i>Phalaenopsis</i> orchids (nursery stock)	Taiwan	2010
<i>Phytophthora</i> spp. host propagative material	All countries	2015
Pineapple	Philippines, Solomon Islands, Sri Lanka, Thailand	2002
Pineapple (de-crowned)	Malaysia	2012
Pineapple (modification)	Philippines, Solomon Islands, Sri Lanka, Thailand	2003

Policy	Country (from)	Year released
Finalised policy advice (continued)		
<i>Plectonycha correntina</i> for the biological control of Madeira vine	Source country	2010
Pome fruit testing	China, Japan, Korea	2003
Poppy straw for processing	Turkey, Hungary, Portugal	2016
Potato propagative material (<i>Solanum tuberosum</i>)	All countries	2013
<i>Pseudomonas syringae</i> pv. <i>actindae</i>	New Zealand	2011
Salacca	Indonesia	2014
Seed contaminants (review of tolerances)	All countries	2000
Stone fruit	USA	2010
Stone fruit (into Western Australia)	New Zealand	2006
Strawberries	Korea	2017
Sweet corn (seed)	USA	2003
<i>Tachardiaephagus somervillei</i> for the biological control of yellow lac scale	All countries	2015
Taro corms (fresh)	Generic	2011
Thrips and Orthotospoviruses	All countries	2017
Tomato (truss)	Netherlands	2003
Tomato (truss, review)	New Zealand	2002
Tortricid moth, <i>Cydia succedana</i> , for the biological control of gorse, <i>Ulex europaeus</i>	Source country	2014
Wood packaging	Generic	2006
<i>Zantedeschia</i> spp. propagative material	All countries	2016
Draft policy advice (in progress)		
Apiaceous crop seeds (review of import conditions)	All countries	2017
Apples	USA	2009 (stop the clock provisions have been activated on this policy)
Avocados	Chile	2018
Brassicaceous crop seeds	All countries	2018

Table 46. Australian Government import policy advice, final and in progress (continued)

Policy	Country (from)	Year released
Draft policy advice (in progress) (continued)		
<i>Capsicum</i> spp.	Fiji, Papua New Guinea, Samoa, Solomon Islands, Tonga and Vanuatu	2018
Chinese jujubes	China	2018
Cucurbitaceous crop seeds (review of import conditions)	All countries	2017
Cut flower and foliage	All countries	2018 (extension of consultation period for another six weeks)
Dates	Middle East, North Africa	2016
Fresh breadfruit	Fiji, Samoa, Tonga	2018
Fresh breadfruit	Fiji, Samoa, Tonga	2017
Fresh decrowned pineapple (<i>Ananas comosus</i>)	Taiwan	2018
Fresh logan fruit	Vietnam	2018
Fresh strawberries	Japan	2017
Limes	Mexico	2018
<i>Pepino mosaic virus</i> and pospiviriods in tomato seeds	All countries	2018
Pest risk analysis for brown marmorated stink bug (<i>Halyomorpha halys</i>)	All countries	2017
Pomegranate	India	2018
Potatoes for processing	New Zealand	2012
<i>Xylella</i> bacterial pathogens	All countries	2018



OTHER INTERNATIONAL ACTIVITIES

Participating in international plant health systems

Australia engages in international activities to gather national and international plant pest information. The information is made available to regional plant health practitioners through a variety of sources including published records, surveillance data, insect and herbarium collections and networks. Intelligence assessments of High Priority Pests informs pre-border risk management and early detection of pests that may enter and establish in Australia.

Australia also participates in setting standards for both international and regional bodies. This cooperative approach boosts Australia's ability to actively monitor pests pre-border, limit their spread, and reduce their impact on the agricultural systems of regional neighbours and trading partners. Significant effort is also invested in gaining intelligence and promoting Australia's interests in the evolution of trade regulations, codes and standards.

Building capacity in the Asia-Pacific region

Activities to build capacity are delivered for Asia-Pacific countries that are close to Australia and for important and emerging trading partners. Commonly, these activities are coordinated through regional bodies, such as the Association of Southeast Asian Nations (ASEAN) or the Asia-Pacific Economic Cooperation (APEC) group of countries. Activities are often delivered with the assistance of funding from the Department of Foreign Affairs and Trade.

Capacity building activities yield a better understanding of the plant pest risks in the region, improve regional biosecurity, build diagnostic networks and capabilities, and foster links among plant health and biosecurity agencies and experts. These programs also help Australia to meet its formal international obligations to assist developing countries. Increasingly, capacity building activities promote approaches to managing phytosanitary risk that safeguard existing trade or create opportunities for expanding markets. An example of capacity building in the Pacific is on [page 24](#).

Anticipating exotic plant pest threats

A range of sophisticated technologies and approaches including research, shared international resources and intelligence are used to anticipate exotic plant pest threats and to help prevent their introduction and spread. Work is undertaken with domestic and international partners to inform responses to emerging risks and to risks associated with deliberate or inadvertent non-compliance.

Information and intelligence are shared between partners through legislative requirements, memoranda of understanding and agreements with international bodies. The intelligence is used to develop cargo profiles and campaigns, and to support identification and management of non-compliance, enabling resources to be targeted at the areas of greatest risk. See also High Priority Pests and National Priority Pests in [Chapter 2](#).

ENSURING AUSTRALIAN EXPORTS MEET REQUIRED STANDARDS

Many Australian plant industries export a proportion of the food and fibre that they produce. A few, notably grains and cotton, export almost everything that is grown. Just as imports are subject to restrictions to protect plant health, exports must also meet conditions, including evidence of pest freedom in the area where the produce was grown. Export trade is therefore heavily reliant on plant biosecurity.

The *Export Control Act 1982* and its subordinate legislation provides the legal framework by which Australian producers can export their products. Exporters must meet the requirements of the act and any quarantine requirements of the importing country.

The Department of Agriculture and Water Resources provides phytosanitary export inspection, verification, and certification services for plants and plant products, to meet the importing country requirements and Australia's international obligations.

The department also negotiates technical market access for Australian export produce and has responsibility for the Australian Wood Packaging Certification Scheme, which enables Australia to provide ISPM 15 compliant wood packaging material for export.

The *Export Control (Plant and Plant Products) Orders 2011* provide criteria for the export of fresh fruits, fresh vegetables, dried fruits, prescribed grain, and plants or plant products for which a phytosanitary certificate, or any other official certificate, is required by an importing country authority.

More specific export legislation is listed in [Table 4.7](#). Strong linkages are maintained with exporters through industry consultative committees (the Grain and Plant Products Export Industry Consultative Committee and Horticulture Export Industry Consultative Committee) which are instrumental in developing effective and efficient operational responses to government policy and legislation.

Table 47. Australia's export legislation, administered by the Department of Agriculture and Water Resources

Legislation
<i>Export Control Act 1982</i>
<i>Export Control (Orders) Regulations 1982</i>
<i>Export Control (Plants and Plant Products) Order 2011</i>
<i>Export Control (Prescribed Goods – General) Order 2005</i>
<i>Export Control (Hardwood Wood Chips) Regulations 1996</i>
<i>Export Control (Organic Produce Certification) Orders</i>
<i>Export Control (Regional Forest Agreements) Regulations</i>
<i>Export Control (Unprocessed Wood) Regulations</i>
<i>Export Control (Plants and Plant Products – Norfolk Island) Order 2016</i>
<i>Export Charges (Collection) Act 2015</i>
<i>Export Charges (Imposition – Customs) Act 2015</i>
<i>Export Charges (Imposition – Excise) Act 2015</i>
<i>Export Charges (Imposition – General) Act 2015</i>
<i>Export Control (Fees) Order 2015</i>
<i>Export Charges (Collection) Regulation 2015</i>
<i>Export Charges (Imposition – Customs) Regulation 2015</i>
<i>Export Charges (Imposition – General) Regulation 2015</i>
<i>Primary Industries (Customs) Charges Act 1999</i>
<i>Primary Industries (Customs) Charges Regulations 2000</i>
<i>Export Inspection Charges Collection Act 1985*</i>
<i>Export Inspection (Establishment Registration Charges) Act 1985*</i>
<i>Export Inspection (Quantity Charge) Act 1985*</i>
<i>Export Inspection (Service Charge) Act 1985*</i>

* Proposed for repeal

Meeting biosecurity conditions of importing countries

To assist Australia's exporters, the Manual of Importing Country Requirements (MICoR) provides information on export conditions required to export plants and plant products from Australia. This includes details on requirements for import permits, phytosanitary certificates, additional declarations and treatments, and other relevant export information and documentation. Information in MICoR Plants is a guide only and exporters are advised to also check with the importing country before exporting.

For plant industries, the Export Documentation (EXDOC) system supports the preparation of export documentation for primary produce prescribed under the *Export Control Act 1982* and associated legislation.

The system provides certification for grain and horticulture exports, as well as for animal products. EXDOC accepts details of proposed exports from exporters. This is linked to endorsements and results in inspections as required, and where applicable, an export permit and phytosanitary certificate is issued. In 2017–18, the department certified 110,000 compliance certificates for grains and horticultural products, up from 99,351 in 2016–17¹⁷.

With funding from the Agricultural Competitiveness White Paper, the Department of Agriculture and Water Resources is also working to standardise instructional material across the export certification system. This includes packages for cold treatment, fumigation, irradiation and vapour heat treatment, and processes to manage and audit accredited properties.



17. Department of Agriculture and Water Resources. Annual Report 2017–18. Accessed online 19 July 2019 agriculture.gov.au/about/reporting/annualreport/2017-18

Negotiating market access

There is a high level of investment in negotiating protocols and building export systems that increase the value of plant exports.

Australia negotiates technical market access with its trading partners for the benefit of Australia's producers. These activities are done in close consultation with industry stakeholders, while taking into consideration the required phytosanitary requirements.

Changes in pest status, the emergence of new or improved treatment technologies, and reviews by trading partners of their import conditions mean that negotiations surrounding market improvement and market maintenance are increasingly the focus of activities to ensure Australia can continue to export its plant products.

When prioritising activities, the department consults with industry to ensure its processes select market pathways with the highest likelihood of technical and commercial success, with a strong focus on evidence-based analyses.

For dried bulk commodities, the Grains Industry Market Access Forum provides a conduit between government and industry to ensure market access decisions are informed and prioritised in line with overall industry benefit.

For the horticulture industry, advice to the Department of Agriculture and Water Resources on the industry's priorities for new or improved market access requests is provided through Hort Innovation's Trade Assessment Panel.

Table 48 details market access achievements since 2000, including access to new markets, improving opportunities in existing markets and preserving existing market access.

First Australian avocados land in Japan

Australia's first avocado exports arrived in Japan in December 2018, following approval of a protocol in May for the export of Hass avocados grown in areas that are free of Queensland fruit flies.

The avocados received a ceremonious launch at the Australian embassy in Tokyo, with officials from Australia and Japan, Japanese importers and retailers, and industry representatives from Hort Innovation and Avocados Australia attending.

Avocados Australia CEO, John Tyas, said the new trade agreement was very exciting news for the Australian avocado industry and acknowledged the cumulative hard work by all agencies involved in making the trade agreement possible.

Two packhouses and ten growers have registered to export to Japan, and a number of consignments have already been sent from Western Australia.

Table 48. Market access achievements for pollinator and plant product exports from Australia since 2000

Year achieved	Country	Commodity
Market access gained and restored		
2000	South Korea	Lemons
2000	South Korea	Oranges
2003	New Zealand	Multiple products (from Goulburn Valley) – pest free area
2003	Peru	Olives, rooted cuttings
2003	USA	Tomatoes, greenhouse
2004	Brazil	Lychees, nursery stock
2004	China	Mangoes
2004	Morocco	Olives, rooted cuttings
2004	New Zealand	Mangoes, irradiated
2005	China	Citrus
2005	Japan	Cherries (from Tasmania)
2005	South Africa	Seed potatoes, microtubers
2005	South Korea	Citrus (unspecified)
2005	South Korea	Mangoes
2006	Japan	Apples
2006	New Zealand	Bananas – resumption of trade
2006	New Zealand	Papaya
2006	Thailand	Potatoes, brushed ware
2006	Thailand	Seed potatoes (from Victoria and WA)
2007	South Korea	Mangoes
2007	South Korea	Multiple products
2008	New Zealand	Lychees
2008	South Korea	Lupins
2008	USA	Cherries (mainland)
2009	India	Peanuts, processed
2009	Japan	Citrus (from Sunraysia) – seasonal freedom
2010	China	Table grapes
2010	European Union	Citrus
2010	India	Kiwifruit
2010	Japan	Citrus (grapefruit)

Table 48. Market access achievements for pollinator and plant product exports from Australia since 2000 (continued)

Year achieved	Country	Commodity
Market access gained and restored (continued)		
2010	South Korea	Cherries (from Tasmania)
2010	Taiwan	Cherries – access reinstated for non pest free areas
2011	Saudi Arabia	Lentils
2012	Bolivia	Sunflower seed, sowing
2012	Chile	Grapevine, nursery stock
2012	Egypt	Honey
2012	India	Pearl millet seed, sowing
2012	Indonesia	Table grapes, summerfruits and cherries
2012	Peru	Chia seed, sowing
2012	Peru	Paulownia, rooted cuttings
2012	Peru	Sorghum seed, sowing
2012	Peru	Wax flower, rooted cuttings
2012	Taiwan	Carrots
2012	Taiwan	Whole lupins, processing
2012	Uruguay	Hemp seeds, sowing
2012	USA	Cotton seed, stock feed
2013	China	Canola – re-opening of trade after resolving quarantine issues preventing exports since 2009
2013	China	Cherries – access after initiating a protocol and meeting Chinese requirements
2013	Ecuador	Barley – for consumption following a technical submission in 2008
2013	Ecuador	Macadamia nuts – access gained for macadamia nuts in-shell for consumption
2013	Malaysia	Creeping signal grass, sowing
2013	Peru	Teak seed, sowing
2013	Phillipines	Bana grass cuttings
2013	USA	Apples
2014	China	Grape seed
2014	Japan	Table grapes
2014	South Korea	Table grapes

Year achieved	Country	Commodity
Market access gained and restored (continued)		
2014	Thailand	Cherries
2014	Thailand	Summerfruit (apricots, plums, nectarines and peaches)
2015	India	Blueberries
2015	Mexico	Onion seed, sowing
2015	Saudi Arabia	Lentils – market access restored
2015	USA	Mangoes and lychees
2015	Vietnam	Citrus – market access restored following import suspensions for Australian fruit
2015	Vietnam	Table grapes – market access restored following suspension for all Australian fruit
2016	China	Nectarines
2016	Fiji	Honey bees (live queens)
2016	French Polynesia	Honey and other apiculture products
2016	Japan	Melon (<i>Cucumis melo</i>)
2016	Japan	Watermelons
2017	Chile	Vegetable seeds, sowing
2017	Iran	Lentils
2017	Iran	Logs without bark and sawn timber
2017	Myanmar	Plants and plant products
2017	Saudi Arabia	Honey
2017	Solomon Islands	Queen bees
2017	Vietnam	Cherries
2018	Iran	<i>Phaseolus vulgaris</i> (bean) seed
2018	Japan	Hard mature avocados
2018	Kuwait	All melons
2018	United Arab Emirates	Strawberries
Improvements in market access		
2005	New Zealand	Zucchini – removal of Queensland fruit fly from the pest list
2005	Thailand	Citrus – 2–3 degree cold disinfestation

Table 48. Market access achievements for pollinator and plant product exports from Australia since 2000 (continued)

Year achieved	Country	Commodity
Improvements in market access (continued)		
2006	Malaysia	Mangoes – new phytosanitary requirements
2006	New Zealand	Tomatoes – improved conditions
2006	South Korea	Carrots – freedom from nematode
2006	South Korea	Citrus – 3 degree cold disinfestation
2006	Taiwan	Multiple products (from Tasmania) – reinstatement of Queensland fruit fly area freedom
2007	Japan	Citrus – 2–3 degree cold disinfestation
2008	India	Mangoes, irradiated
2008	India	Oats
2008	Indonesia	Citrus – in-transit cold disinfestation
2008	Indonesia	Table grapes – in-transit cold disinfestation
2008	Japan	Cherries (from Tasmania) – revised protocol
2008	Japan	Mangoes – reduced inspection rate
2008	Taiwan	Multiple products – 2–3 degree cold disinfestation
2008	United Arab Emirates	Multiple products – removal of Standard Operating Policy and Procedure requirement
2009	China	Citrus – revised protocol
2009	China	Mangoes – revised protocol
2010	China	Apples (from Tasmania) – improved conditions
2010	Japan	Grapefruit
2010	South Korea	Citrus
2010	USA	Cherries (from mainland) – stand alone cold treatment
2011	India	Macadamia nuts
2011	Indonesia	Citrus – in-transit cold disinfestation from non pest free areas
2011	Indonesia	Table grapes – in-transit cold disinfestation from non pest free areas
2011	USA	Citrus – 3 degree cold disinfestation
2012	India	Citrus (unspecified) – more favourable temperatures and flexible conditions
2012	India	Citrus (unspecified) – 3 degree in-transit cold treatment
2012	New Zealand	Avocado – in-transit cold treatment

Year achieved	Country	Commodity
Improvements in market access (continued)		
2012	New Zealand	Citrus (unspecified) – in-transit cold treatment
2012	New Zealand	Pears – in-transit cold treatment
2012	New Zealand	Table grapes – in-transit cold treatment
2012	USA	Apples
2013	China	Canola
2013	Hong Kong	Plants and plant products
2013	Indonesia	Soybeans – removal of a five per cent tariff
2013	Iran	Grain and seed
2013	Kenya	Wheat
2013	Libya	Grain and seed
2013	Phillipines	Fruit – revised protocol including favourable cold treatment conditions
2013	Qatar	Hay
2013	South Korea	All products – FTA negotiations concluded in December 2013
2013	Taiwan	Apples
2013	Thailand	Citrus – some import limitations removed by Thailand
2014	Thailand	Grain and seed
2015	China	Wheat and barley – access improved with new protocol
2015	Korea	Cherries – improved inspection rates
2015	Thailand	Cherries – new temperature for cold treatment
2015	Thailand	Citrus – more varieties approved for export from non pest free area districts
2015	Thailand	Persimmons – irradiation for fruit fly control
2015	Thailand	Table grapes – new temperature for cold treatment
2016	Colombia	Kangaroo paw nursery stock
2016	Japan	Pumpkins
2016	Japan	Walnuts
2016	Korea	Blood oranges and other sweet orange varieties
2016	USA	Lychees
2016	USA	Mango
2017	Bangladesh	Lentils

Table 48. Market access achievements for pollinator and plant product exports from Australia since 2000 (continued)

Year achieved	Country	Commodity
Improvements in market access (continued)		
2017	Iran	Chickpeas
2017	Iran	Wheat
2017	Pakistan	Chickpeas
2018	India	De-hulled kiln dried oats
2018	Indonesia	Seed potatoes
2018	Iran	Rolled oats and oat flakes
2018	Thailand	Persimmons
Maintained in market access		
2004	Malaysia	Cut and dried flowers
2004	South Korea	Potatoes
2004	Thailand	Citrus
2004	Various	Citrus
2006	Indonesia	Multiple products
2007	Canada	Summerfruit
2007	China	Citrus (unspecified)
2007	India	Grain
2007	Mauritius	Citrus
2008	Mauritius	Potatoes
2009	Thailand	Multiple products
2010	New Zealand	Lychees
2010	New Zealand	Mangoes
2010	New Zealand	Papaya
2011	Taiwan	Summerfruit (peaches and nectarines)
2011	Thailand	Citrus
2011	Thailand	Multiple products
2011	Thailand	Table grapes
2011	Vietnam	Multiple products
2012	India	Pome fruit
2012	Indonesia	Multiple products
2012	South Korea	Barley (malting), processing

Year achieved	Country	Commodity
Maintained in market access (continued)		
2012	Taiwan	Summerfruit (plums)
2012	Vietnam	Multiple products
2013	All markets	All products – implementation of a new security paper for export health certificates
2013	Taiwan	Apples – revised improved export protocol
2013	Thailand	Apples
2013	Thailand	Avocado
2013	Thailand	Kiwifruit
2013	Thailand	Pears
2013	Thailand	Persimmon
2013	Thailand	Strawberries
2013	USA	Cottonseed, for stock feed – reinstated methyl bromide fumigation and new tolerance levels
2014	China	Table grapes
2015	Indonesia	Wheat – access maintained for grain for consumption
2015	Vietnam	Grains, consumption
2015	Vietnam	Nuts, consumption
2015	Vietnam	Plant based stockfeed
2015	Vietnam	Seed, sowing
2016	India	Wheat flour
2016	Korea	Mangoes
2017	Myanmar	Plants and plant products
2017	New Zealand	Fruit fly host commodities

Reinstating Tasmania's fruit fly free status

In early 2019 Tasmania's fruit fly pest free status was re-instated following the successful eradication of a 2018 incursion of Queensland fruit fly (*Bactrocera tryoni*) on Flinders Island and locations in northern Tasmania near Launceston and Devonport.

With statewide fruit fly pest free area status, Tasmania has an important trading advantage, with high biosecurity status crops such as cherries having access to lucrative export markets. In 2016–17, \$32 million of fruit was exported from Tasmania, with \$29 million of that from cherries alone¹⁸.

Tasmania's pest free status was revoked in early 2018 following the detection of fruit flies. The finding led to the state's largest ever biosecurity response to eradicate the pest, supported by the government, industry and the community.

Control zones and restrictions on the movement of host produce were established at all incursion locations which were vital in stemming the further spread of fruit flies. Eradication activities were undertaken as per national fruit fly management protocols. Treated fruit arriving in Tasmania was also closely monitored.

Producers in control areas particularly felt the impacts, with significant loss of both domestic and export market opportunities. Any movement of fruit from within a control area required an appropriate treatment, such as fumigation or cold disinfestation, the facilities for which were not immediately available.

Following the re-instatement of fruit fly pest free area status, routine biosecurity measures continued in Tasmania, including monitoring of fruit fly traps, strict import conditions, targeted inspections of produce and checking passengers, luggage, freight and mail at the border.



Biosecurity Tasmania entomologist Dr Guy Westmore takes a closer look at Queensland fruit fly samples. Image courtesy of DPIPW E Tasmania

Plant pest surveillance supports market access

Governments and industries make systematic checks for exotic pests within our borders to provide evidence that Australia does not have certain exotic pests, particularly those that could preclude market access for exporters. Nil findings are recorded and collated to provide evidence of absence of a pest from the country, state or region.

In recent years Australia's trading partners and international organisations have asked for more robust and quantitative evidence of Australia's plant health status to both justify import requirements and defend export certification. It is no longer sufficient to state a pest is 'not known to occur', or rest on the assurance of Australia being historically free of a particular pest. Reporting on the likely presence or absence of pests at a particular place and time is crucial to support market access negotiations.

To meet these challenges the Australian Government invested in improving biosecurity surveillance and analysis through the Agricultural Competitiveness White Paper, strengthening the ability of Australian industry groups and governments to collate, share, analyse and report surveillance data on plant pests, including fruit fly.

Better access to more surveillance data gives trading partners confidence in claims of pest absence and area freedom. This makes things easier for exporters, minimising delays and allowing producers to get a better price for their quality produce overseas.

Australia's plant pest surveillance programs are detailed in **Chapter 5**.

National Minimum Dataset Specifications for surveillance

To ensure consistency in the collection and sharing of surveillance data Australia uses the national minimum dataset specifications (NMDS), introduced in 2017 following agreement from the National Biosecurity Committee. To comply with NMDS, each record has its own unique identifier code, with comprehensive data captured on the location and type of surveillance activity, as well as the name and jurisdiction of the organisation entering the data.

With the use of the NMDS and real time data tools such as AUSPestCheck™, Australia will continue to be amongst a handful of countries able to fully comply with the International Standards for Phytosanitary Measures on recording and reporting of plant health surveillance information.

18. Department of Primary Industries, Parks, Water and Environment. Tasmanian Agri-Food Scorecard 2016–17. Accessed online 18 July 2019 dpiuwe.tas.gov.au/Documents/Tasmanian%20Agri-Food%20SCORECARD%202016-17%201.0.pdf

Solomon Islands surveillance manages off-shore risk

In February 2018 biosecurity specialists from the Northern Australia Quarantine Strategy (NAQS) joined their Biosecurity Solomon Islands (BSI) counterparts to undertake plant health surveys of coconut and cocoa plantations.

The surveys provided an opportunity for BSI staff to gain skills and experience in field sample collection, triage and pest identification, and for the NAQS team to collect valuable information to aid the fight against the coconut rhinoceros beetle, which is not in Australia.

A survey of the country's coffee growing regions will also be completed in 2019, with NAQS scientists conducting offshore survey work in collaboration with biosecurity agencies in Papua New Guinea and Timor-Leste.

This type of regional surveillance activities help to strengthen local industries and provide Australia with an important mechanism for 'early warning' of exotic plant pests and diseases.



The Department of Agriculture and Water Resources has been working to build biosecurity capacity in the Solomon Islands since 2013, with the surveys delivered under the second phase of the Australian Aid funded Solomon Islands Biosecurity Development Program (SIBDP).



Sally Cowan (NAQS) with Andrew Sale (SIBDP In-Country Liaison Officer) during the 2018 cocoa survey at Kariki Village, Western Province. Image courtesy of the Department of Agriculture and Water Resources



Barbara Waterhouse (NAQS) entering a coconut plantation in the Western Province of Solomon Islands. Image courtesy of the Department of Agriculture and Water Resources

Border biosecurity

Live animals and plants, packaging, plant material, animal products and certain food from overseas could introduce some of the world's most damaging pests and diseases into Australia. This could devastate our valuable agriculture and tourism industries and unique environment.

With increasing levels of international trade and travel, the detection of threats at the border remains an important element of the biosecurity system.

Australia has strict laws relating to the importation of certain goods, including goods brought back from overseas by travellers, to reduce the chance of an exotic pest incursion.

The Department of Agriculture and Water Resources has primary responsibility for international border biosecurity activities, to restrict the import of items that pose a risk to Australia. The department undertakes a range of measures at the border to reduce and detect biosecurity risks, including:

- raising awareness of Australia's biosecurity requirements among importers, industry operators and travellers
- screening and inspecting international vessels, passengers, cargo, mail, animals, plants and plant products arriving in Australia
- managing the high biosecurity risks of live plants and animals through containment, observation and treatment at quarantine facilities
- identifying and evaluating the specific biosecurity risks facing northern Australia through the Northern Australia Quarantine Strategy.

Activities at the border are risk-based, informed by evidence and subject to review and continual improvement.

In 2017–18, the border assessment, screening, inspection or clearance of incoming trade and passengers by the Department of Agriculture and Water Resources involved inspection of:

- 18,000 vessels
- 35,000 sea containers
- 152 million mail items
- 21,000 lines of imported food.

COLLABORATIONS TO REDUCE BORDER BIOSECURITY RISKS

Activities to deal with risks posed by cargo imports

The Australian Government works with the cargo and shipping industries to prevent pests and diseases being imported with cargo. Biosecurity restrictions on imported goods can be complex. People who wish to import goods are advised to check whether the goods will be allowed to enter. Sometimes the treatments will be more costly and time consuming than the goods are worth.

First time or infrequent importers are encouraged to use the services of a licensed customs broker to facilitate the process.

BICON, the Australian Government's Biosecurity Import Conditions database, holds information on requirements for foreign plant, animal, mineral and human commodities. People wishing to bring in goods can check the conditions of entry on the Department of Agriculture and Water Resources website.

The information available on BICON is the same information that biosecurity officers use when inspecting goods arriving in Australia. Import conditions within BICON are regularly reviewed, so importers need to check the conditions each time they travel or send goods. More information on import risk assessment is on **page 130**.

First point of entry biosecurity operators

First point of entry (FPoE) refers to sea ports and airports that accept arrivals from overseas. FPoE operators and staff are in a unique position to notice biosecurity risks and respond to them. The Australian Government works with FPoE authorities, operators and workers to reduce biosecurity risks.

Operators and authorities are required to have facilities, arrangements and systems in place to manage the risk of pests and diseases entering, spreading and establishing. The requirements for FPoE authorities and operators are listed in the First Point of Entry Biosecurity Standards for both landing places and ports. For example, seaports must keep wharves free of vegetation and manage weeds so that they do not flower and spread seed.

Rubbish, such as old tyres and packaging, must not be left lying around the wharf area as it can create pools of water and attract pests. Baits are put out in the area for rodents and feral animals. FPoE authorities and operators must manage pools of water that might harbour mosquitos, and if necessary, treat any water to prevent the breeding of insect vectors of pests and diseases.

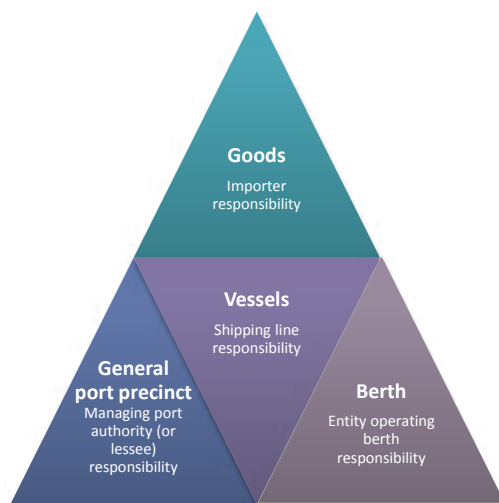
The Australian Government has set up the See. Secure. Report. Hotline (1800 798 636) for FPoE workers to report any biosecurity risks they find during day-to-day operations.

Staff are required to report any hitchhiker pests found on or in vessels and containers or non-containerised cargo. Any unwanted goods from a vessel or cargo consignment – whether packaging, weeds, soil, straw, food scraps, contaminated or spilled goods – are considered waste goods subject to biosecurity control. Staff are required to dispose of waste goods in biosecurity bins, rather than ordinary garbage bins.

Timber dunnage (loose wood, matting, or similar material that is used to keep a cargo in position in a ship's hold) and packaging can carry a variety of borers, beetles, ants and termites. Workers at FPoE are asked to report any evidence of the presence of a timber pest such as frass or sawdust piles under dunnage or imported timber, and tracks or holes in the timber that are signs that exotic timber pests are present.

The special responsibilities of FPoE authorities, operators and staff are an example of the biosecurity responsibilities of every Australian (see Figure 87).

Figure 87. Entity responsibility for biosecurity risks, first points of entry (ports)



Biosecurity at ports and other first points of entry is shared between stakeholders. Image courtesy of the Department of Agriculture and Water Resources

Strong action keeps bugs at bay

In 2018 both Australia and New Zealand were forced to take action to keep the brown marmorated stink bug (BMSB) from becoming established in either country. A voracious feeder, the stink bug is known to feed on more than 300 hosts and is one Australia's top 10 high priority plant pests.

Overseas experience has shown that if the bugs established in Australia they would cause significant issues for the general community as BMSB shelter in buildings and equipment and have a foul-smelling odour when crushed or disturbed. The BMSB would also have a significant impact on horticulture, grains and cotton crops, nursery stock and ornamental plants, and potentially damage many other plants in our environment.

BMSB's abilities to lie dormant and travel around the world hidden in cargo, to fly, and to feed on a wide range of plant hosts, has enabled it to make its way to new regions and spread rapidly around the world. In the late 1990s the bug arrived in North America from eastern Asia and has since spread to 44 states in the United States. More recently it has spread to several countries in Europe, notably Italy.

Since 2014, Australia has intercepted increasing numbers of live BMSB adults as hitchhikers on various goods being shipped to Australia in the season (from September to April). Initially associated with vehicles and machinery from the United States, stronger measures are now applied to a wider range of imported sea cargo from more countries in Europe. In 2018, for the first time, BMSB infested ships were turned away from both Australia and New Zealand.

In 2018, there were two nationally cost-shared responses under the Emergency Plant Pest Response Deed (EPPRD) between agricultural industries and governments for post-border detections of BMSB. The response to each detection was swift, with measures put in place involving risk assessment, fumigation, trapping and monitoring to prove freedom of the pest.



Brown marmorated stink bug (BMSB). Image courtesy of David R Lance, USDA APHIS PPQ

Don't be sorry, just declare it

In May 2018 a public awareness campaign was launched to help international travellers understand and meet their biosecurity obligations when coming into Australia.

More than 21 million passengers are screened for biosecurity risk material each year at Australian airports and this number is expected to grow by five per cent annually.

The 'Don't be sorry, just declare it' campaign includes a new incoming passenger video featuring eight Australian biosecurity officers and uses humour to engage passengers with this clear message. The video is available in a number of languages including English, Arabic, Cantonese, French, Hindi, Japanese, Korean and Mandarin.

The Department of Agriculture and Water Resources also released two short pre-departure videos online to remind Australians travelling overseas and international visitors to think about what they pack. Each video features commodities and scenarios frequently encountered by officers at airports and shipping terminals.

You can watch the 'Don't be sorry' videos on the department's YouTube channel.



Biosecurity officers take the lead in the new video for travellers. Image courtesy of the Department of Agriculture and Water Resources (photographer Michael Masters)

GOVERNMENT SCREENING, INSPECTION AND SURVEILLANCE ACTIVITIES

The Department of Agriculture and Water Resources employs more than 3,900 officers, many of whom contribute to the inspection of international vessels and passengers, cargo and mail for biosecurity risks as they arrive at airports, seaports and mail centres. Officers operate in conjunction with the Department of Home Affairs, which polices people movements and intercepts illegal goods, such as drugs and weapons.

Some goods need to be declared at the border whether they are being brought back from overseas or arriving in the mail. The department's sophisticated risk assessment and intelligence tools are used to assess biosecurity risk and respond appropriately.

Screening passengers

In an effort to intercept risk material from being brought in from overseas, when travelling to Australia, passengers are provided with an Incoming Passenger Card by the crew on the aircraft or cruise vessel.



Image courtesy of DHA

The Incoming Passenger Card is a legal document and must be completed correctly. Passengers must declare if they are carrying certain food, plant material or animal products.

Declared goods can be taken to the clearance point where they will be assessed by a biosecurity officer.

Alternatively, goods such as food, plant material or animal items can be voluntarily disposed of in bins located in the terminal.

Biosecurity officers will assess the level of biosecurity risk associated with the declared goods. Passengers may be required to provide information or documents to assist in determining the risk. Biosecurity officers also refer to the department's import conditions database, BICON.

Some products may require treatment such as fumigation or irradiation to make them safe. Other goods may not be allowed into the country if the risk is too great.

Biosecurity officers can also inspect baggage when passengers do not declare any goods. If arriving passengers are found to have made a false declaration on the Incoming Passenger Card, they can be penalised under the *Biosecurity Act 2015*.

Screening mail

When goods arrive at the Australian border they are assessed for biosecurity risk and a decision is made on whether they can be imported.

When sending mail to Australia, the contents of packages must be accurately declared on a postal declaration. Biosecurity officers assess the risk based on the declaration and use detector dogs and x-ray machines to check packages.

Some goods may require treatment (at the importer's expense) before they are permitted into Australia. Goods that are not permitted will be forfeited to the Australian Government and destroyed. If any attempt has been made to conceal goods, the importer may be subject to an investigation and possible criminal prosecution.

Use of detector dogs

Detector dogs have been used by the Department of Agriculture and Water Resources to play a key role in helping to protect Australia from exotic pests and diseases since 1992. They are used in combination with other biosecurity strategies and detection technologies.

There are approximately 40 detector dog teams operating in international airports, seaports, mail centres and courier depots throughout Australia. Detector dogs are currently sourced exclusively from the Australian Border Force Detector Dog Breeding program and undergo rigorous testing to ensure they possess the ideal characteristics for the job. They have an extraordinary sense of smell, are co-operative and gentle with people and possess extreme hunt, food and retrieve drives.

Detector dogs are trained to find items that could bring pests or diseases into Australia such as certain food, plant material and animal products. They have a working life of about six to eight years, and on average, find between 3,000 and 3,500 biosecurity risk items during their working life.

There are two types of detector dogs which are differentiated by their method of indication to target odour:

- Passive response detector dogs are trained to sit in the presence of target odour. They are rewarded with food or praise from their handler when they find biosecurity risk material. Passive response detector dogs generally work among the public at international passenger terminals.
- Multi-purpose detector dogs are trained to offer a defined response based on the environment in which they are operating. At an international passenger terminal, they will sit beside a passenger or piece of baggage. When screening objects in mail facilities and private depots they will dig at the source of target odour.

National Border Surveillance Program

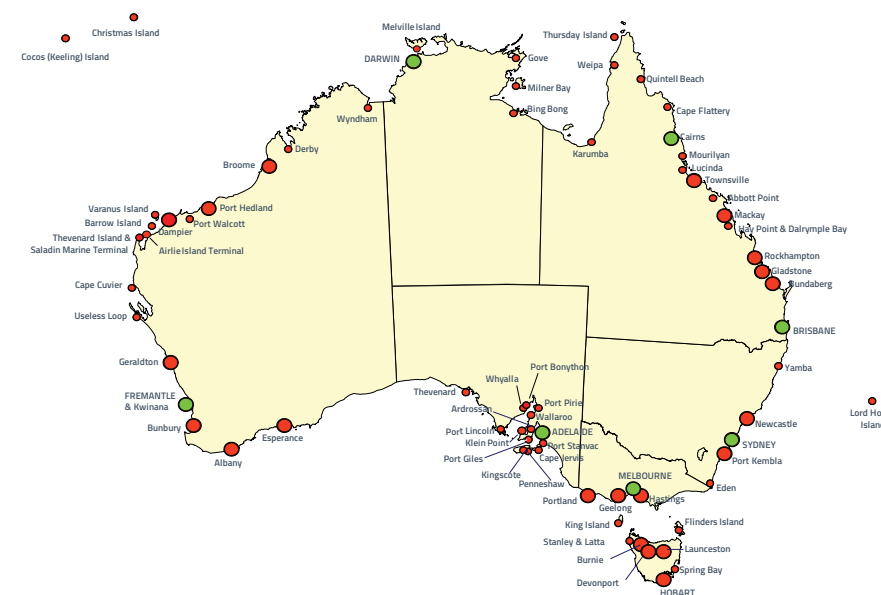
The National Border Surveillance Program commenced in late 2016 and operates under the policy direction of the Compliance Division within the Department of Agriculture and Water Resources. National border surveillance teams are located in all major Australian mainland ports (see Figure 88).

The teams' scope of work includes plant health surveillance at all Australian first points of entry (seaports and airports), premises of businesses handling imported goods of biosecurity interest or biosecurity risk material (so-called Approved Arrangements), and areas associated with or surrounding these.

The primary focus of the border surveillance program is the early detection of pest organisms that may have escaped from conveyances, containers, goods or passengers at the border, before they have the chance to spread to production areas.

Data from the surveillance is also used to inform biosecurity policy areas for the review of import conditions and requirements for Approved Arrangements.

Figure 88. Ports of Australia



Stakeholders implement biosecurity activities at ports all around Australia's coast. Red dots indicate a first point of entry. Green dots indicate where national border surveillance teams are located. Image courtesy of Ports Australia

PROTECTING OUR NORTHERN COASTLINE

The unique biosecurity threats in Australia's north – stretching from Cairns in Queensland to Broome in WA and including Torres Strait – are managed by the Department of Agriculture and Water Resources' Northern Australia Quarantine Strategy (NAQS).

The northern coastline is vast and sparsely populated. It faces biosecurity risks from countries close to Australia including Indonesia, Timor-Leste and Papua New Guinea. These countries have many pests, plant diseases and weeds not present in Australia, which could be spread by human activities as well as natural pathways.

There are three main components to NAQS: surveillance, location and cooperation.

Officers carry out surveillance for exotic pests, diseases and weeds on horticultural plants as well as native and cultivated alternative hosts. Pest checks are made for nationally agreed target species as well as those identified as High Priority Pests during biosecurity planning for industries. Reports of damage on host plants are also investigated. Increasingly, surveillance is conducted in partnership with industry and other government partners.

Each year NAQS notifies relevant authorities when it detects a pest or disease that is a new record for Australia or an extension of range. This intelligence improves national and local incursion responses and aids in determining plant pest status across the north.

In Torres Strait, department officers manage risks associated with the southward movement of people, vessels, aircraft and goods through the Strait to mainland Australia. This includes traditional visitors from Papua New Guinea under the Torres Strait Treaty – up to 30,000 movements per year.

Officers regulate plant risks associated with movements of goods and conveyances from Papua New Guinea and through the islands. Regulated pathways are from Papua New Guinea into Torres Strait, and from the Torres Strait Protected Zone to the Permanent Biosecurity Monitoring Zone, and from either zone to mainland Australia, as shown in Figure 89.

Figure 89. Biosecurity risk pathways regulated by NAQS



Image courtesy of the Department of Agriculture and Water Resources

Most importantly, the success of activities is due to the cooperation and good will of people in northern Australia. The strategy invests heavily in community engagement including the well-known campaign 'Top Watch' to create strong community support. As a result, biosecurity awareness is high and local communities comply with requirements in the Torres Strait, report unusual pests and diseases and provide access to land and country for surveillance.

Exotic fruit fly surveillance and eradication

Exotic fruit fly species represent one of the highest risks for Australia's horticultural industry. Target exotic fruit fly pests are present in Papua New Guinea, including Oriental fruit fly and melon fly. Annual incursions into the Torres Strait by these pests are associated with monsoonal weather patterns moving over Papua New Guinea. Incursions are detected by permanent traps placed on the northern islands of Torres Strait that are monitored by the NAQS team.

These seasonal incursions are eradicated each year under the Exotic Fruit Fly in Torres Strait Response Plan. The Response Plan is managed by the Queensland Department of Agriculture and Fisheries, and eradication responses are delivered by the Department of Agriculture and Water Resources and the Queensland Government. This response falls under the auspices of the Emergency Plant Pest Response Deed. That means that potentially affected industry Parties pay a share of the cost of keeping these pests out of Australia. See Chapter 6 for more on the Emergency Plant Pest Response Deed.

POST-ENTRY PLANT QUARANTINE

Imported live plant material can introduce foreign plant pests and diseases, but it can be advantageous at times for growers to import new varieties, to help maintain the competitiveness and productivity of Australian agribusiness. As a result, live plants can be imported but are subject to conditions and risk assessment processes. This includes new plant material spending time in post-entry quarantine facilities, allowing for growth and disease screening and testing to eliminate specific disease concerns.

Live plant material is defined as all live plants or plant material, other than seeds, that is imported for the purposes of growth or propagation. Import conditions vary, depending on the genus and species of the plant and the form of the imported plant material.

Plant importers begin the process by checking import conditions using the import database BICON, and, if the species is allowed into Australia, apply for an import permit. The national plant protection organisation of the country of export will need to inspect the plants and issue a phytosanitary certificate prior to export. New species that have not previously been imported will be subject to a weed risk assessment, after which the department may choose to develop import conditions for the new species. Plant material classified by departmental officers as high risk will be taken directly to the government post-entry quarantine facility at Mickleham in Victoria. Other nursery stock and restricted seeds can be grown and screened for pests at an approved facility (see Table 49).

The amount of time the plants spend in a post-entry quarantine facility depends on the biosecurity risks they pose and the specific testing required. Once all required testing and screening procedures have taken place and the plants are deemed to be free of any biosecurity concern, the department will release the goods to the importer, who covers all associated costs for services.

Table 49. Australia's post-entry plant quarantine facilities

	ACT	NSW	QLD	SA	TAS	VIC	WA	NT
Australian Government facilities						1		
State government facilities approved for high-risk plant material		1	2	1		2	1	
Scientific (S) and private (P) facilities approved for high-risk plant material	1 (S), 1 (P)	2 (P)	2 (P)	1 (S)	1 (P)		2 (P)	
Private facilities approved for medium-risk plant material		11	15	8	5	57	10	
Scientific (S) and state government (SG) facilities approved for medium-risk plant material	14 (S)	3 (S), 2 (SG)	3 (S), 1 (SG)	7 (S), 3 (SG)	3 (S)	2 (S), 2 (SG)	6 (S), 2 (SG)	

Collaboration in the north building biosecurity awareness

A project in the Northern Territory is helping build biosecurity awareness and capability in south-east Asian farming communities, with a focus on the large community of Vietnamese and Cambodian growers of horticultural crops in Darwin.

Since 2018, Biosecurity Engagement Officer Chris Pham, who is from a Vietnamese grower family, has been employed within NT Farmers to actively communicate biosecurity messages in a culturally and linguistically appropriate way, whilst acting as a conduit between growers and government.

The collaborative project is a joint initiative of the Northern Australia Quarantine Strategy (NAQS), NT Farmers and the NT Department of Primary Industry and Resources.

Surveys in late October 2018 on grower properties by NT and NAQS botanists, facilitated by Chris, plant pathologists and entomologists, provided an opportunity to engage with growers about their biosecurity practices and knowledge.

In recent years, growers have been impacted by emergency responses to cucumber green mottle mosaic virus, banana freckle and citrus canker, which has affected relationships with government. These surveys provide a platform to undertake proactive surveillance with growers outside of a response, whilst building positive relationships and biosecurity capability.

Indigenous rangers have also visited grower properties as part of their 'Biosecurity Fundamentals' training, which for many was their first opportunity to see how their biosecurity surveillance activities in remote Australia link back to the farm gate.

This project was supported by the Agricultural Competitiveness White Paper.



NT Farmers biosecurity engagement officer Chris Pham with grower Tuan Dang. Image courtesy of John Westaway