# DAFF Biosecurity 2030 Roadmap

Protecting Australia’s environment, economy and way of life

Department of Agriculture, Fisheries and Forestry, Published October 2024

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**Acknowledgement of Country**

We acknowledge the Traditional Custodians of Australia and their continuing connection to land and sea, waters, environment and community. We pay our respects to the Traditional Custodians of the lands we live and work on, their culture, and their Elders past and present.

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## Minister’s foreword

Biosecurity impacts every Australian. It is key to our nation’s productive agricultural sector,

underpins our international import and export trade, protecting people and our unique

natural environment.

An effective biosecurity system safeguards our health, protects our food supply chains and

eases cost of living pressures, and defends the culture and values of First Nations people and

our wider community.

No one should doubt the role or importance of biosecurity to Australians. Everyone has a role

to play.

I congratulate the team at the Department of Agriculture, Fisheries and Forestry for its ongoing

commitment to biosecurity and ensuring the DAFF Biosecurity 2030 Roadmap continues to

be fit for purpose. This Roadmap provides both a guiding document for the department and

transparency for stakeholders in how the department will meet the current and future challenges

of biosecurity. I am particularly happy to see the Roadmap’s explicit support for our neighbours

in their biosecurity systems. Our expertise in biosecurity should be shared, to support regional

and global responses to threats that do not respect lines on maps.

I also welcome the department’s commitment, through the Roadmap, to the importance, expertise

and knowledge of our First Nations people.

This government is committed to strengthening Australia’s biosecurity system, not only for today,

but for our future. By delivering Australia’s first Sustainable Biosecurity Funding package we are

ensuring that Australia’s biosecurity system has a robust foundation to invest in its people, systems

and technology. Our commitment, which is at the core of this Roadmap, ensures that decisions can

be made today that will allow us to confidently meet the challenges of tomorrow. This Roadmap

supports the Australian Government’s commitment to the National Biosecurity Strategy which

ensures that all governments are working towards common goals and acting together to combat

the challenges.

The Australian Government and the department will continue to work with industry, farmers,

research organisations, First Nations and the community to keep our biosecurity measures strong,

contemporary, and fit for purpose.

The DAFF Biosecurity 2030 Roadmap will not only protect our $90 billion agricultural sector and its future growth, but also Australia’s hard-earned reputation as a clean, green and sustainable agricultural trading partner.

The Hon Julie Collins MP

Minister for Agriculture, Fisheries and Forestry

## Setting the purpose for the DAFF Biosecurity 2030 Roadmap

Australia’s unique natural environment is a cornerstone of our national identity and underpins the diverse agricultural sector.

A strong, collaborative and sustainable biosecurity system is crucial for protecting Australian livelihoods and strengthening the environment and economy, including tourism, trade, and agriculture. Biosecurity works to prevent the arrival and spread of harmful pests and diseases, ensuring Australia maintains its clean and green reputation. By safeguarding human health and essential environmental resources, robust biosecurity measures enable the continued production of safe and valuable Australian products, benefiting both domestic and global partners.

Commonwealth Biosecurity 2030 was initially published in 2021. Since this time there have been significant changes to the strategic and operating environment for the Department of Agriculture, Fisheries and Forestry (DAFF). These changes have included the:

* establishment of the National Biosecurity Strategy agreed by all governments in 2022
* new sustainable biosecurity funding package announced in the 2023‑24 Federal Budget
* machinery of government changes in 2022 when we became the Department of Agriculture, Fisheries and Forestry.

Accordingly, we recognised it was time for a refresh.

The DAFF Biosecurity 2030 Roadmap (the Roadmap):

* aims to deliver a fit for purpose risk-based biosecurity system that effectively, efficiently, and sustainably protects Australia’s health, economic, environment, and national security interests against the threats of today and tomorrow
* provides a clear direction for our Department’s biosecurity functions, initiatives, and investments, with annual action plans ensuring continued transparency and effective delivery
* acknowledges the pivotal role the Department plays, and the importance of our collaborations and partnerships with stakeholders including states, territories, research institutions, international partners, industry, First Nations people and the community
* builds on existing strategies, plans, and reviews to inform our strategic actions and priorities. These include the [Intergovernmental Agreement on Biosecurity](https://www.agriculture.gov.au/biosecurity-trade/policy/partnerships/nbc/intergovernmental-agreement-on-biosecurity), the [National Biosecurity Statement](https://www.agriculture.gov.au/biosecurity-trade/policy/partnerships/national-biosecurity-statement) and key expert reviews.

The Roadmap is key to our delivery of the Australian Government’s contributions in the [2022 National Biosecurity Strategy](https://www.biosecurity.gov.au/about/national-biosecurity-committee/nbs) (NBS). The NBS identifies 6 key priorities:

1. Fostering a shared biosecurity culture
2. Strengthening our partnerships
3. Developing our highly skilled workforce
4. Enhancing our preparedness and response capabilities
5. Optimising our sustainable investment opportunities
6. Innovating through technology, research and data

This Roadmap’s [9 strategic actions](#_Strategic_actions) directly align with these priority areas. This underlines the Australian Government’s commitment to delivering the NBS, in partnership with all jurisdictions, industries, research institutions, community groups and other stakeholders.

We acknowledge that First Nations people are central to our efforts in protecting and strengthening our biosecurity system. Indigenous knowledge, practices and involvement are crucial in managing and responding to biosecurity threats effectively. As a department we are committed to meaningful connections with First Nations people to achieve better policy outcomes and a biosecurity system that supports Australia’s unique environment, economy, health and culture.

The Roadmap will continue to be guided by our [Statement of Strategic Intent](https://www.agriculture.gov.au/about/reporting/statement-of-strategic-intent) and [Annual Corporate Plans](https://www.agriculture.gov.au/about/reporting/corporate-plan). Together these documents outline our Department’s high-level strategic direction and goals towards and beyond 2030 and set the pathway for delivery.

We are delivery-focused and connected, committed to working in partnership with industry, First Nations peoples and other stakeholders to grow Australia’s agricultural sector together.

Adam Fennessy PSM

Director of Biosecurity

Secretary

Department of Agriculture, Fisheries and Forestry

## DAFF Biosecurity 2030 Roadmap - goal and enablers

### Goal

Through implementing the DAFF Biosecurity 2030 Roadmap we will achieve our goal of:

A biosecurity system that provides an appropriate level of protection for Australia’s people, lifestyle, environment and trade-focused economy, supporting a sustainable and prosperous Australia. Our leadership of national biosecurity will focus on preserving animal, plant and human health through a connected, resilient and shared risk-based approach that is underpinned by science and knowledge.

### Enablers

Realising this goal will require a strong focus on 5 enabling functions:

1. **Governance—**A strong, ongoing commitment by governments, industry and the community to carry out their evolving roles and responsibilities as part of the biosecurity system.
2. **People—**A workforce that has the capacity, skills and flexibility to prepare for and respond to emerging biosecurity risks, challenges and opportunities.
3. **Technology—**An integrated, secure, data driven and technology-enabled biosecurity system pre-border, at the border and post-border.
4. **Regulation—**A regulatory environment that supports us to respond to current and future biosecurity challenges and opportunities.
5. **Funding—**A funding and investment model that is sustainable for the long-term.

### Strategic actions (at a glance)

1. Accelerate our efforts with key partners to create a strong, future-orientated and efficient national biosecurity system and to better promote our leadership role.
2. Expand offshore assurance arrangements and overseas supply chain integration.
3. Increase partnership activities with Australia’s near neighbours.
4. Invest in a skilled and responsive workforce supported by improved regulatory tools and information.
5. Adopt advancements and innovations in detection technologies, risk assessment and business practices.
6. Generate a stronger shared responsibility and commitment to biosecurity by enhancing awareness and understanding.
7. Increase use of offshore intelligence, research and data to support risk-based interventions, preparedness and response.
8. Lift our national preparedness, resilience and response to exotic pest and disease incursions and strengthen our national leadership role.
9. Align our funding and investment model to emerging system needs.

### Strategic actions (detailed)

The goal of the DAFF Biosecurity 2030 Roadmapwill be achieved through 9 strategic actions. The actions should be considered alongside, and as complementary to, the [DAFF Statement of Strategic Intent](https://www.agriculture.gov.au/about/reporting/statement-of-strategic-intent), [Corporate Plan](https://www.agriculture.gov.au/about/reporting/corporate-plan), [Regulatory Practice Statement](https://www.agriculture.gov.au/about/commitment/regulator-practice) and [Ministerial Statements of Expectation](https://www.agriculture.gov.au/agriculture-land/farm-food-drought/ag-vet-chemicals/better-regulation-of-ag-vet-chemicals/ministerial-statement-of-expectations#:~:text=The%20Ministerial%20Statement%20of%20Expectations,regulatory%20functions%20of%20the%20APVMA.&text=If%20you%20have%20difficulty%20accessing,LINE%20AREA%20EMAIL)%20for%20assistance.).

#### Accelerate our efforts with key partners to create a strong, future-orientated and efficient national biosecurity system and to better promote our leadership role

The success of the national biosecurity system in protecting our environment, economy and way of life relies on the efforts of all parties. As leaders of the national systems, we will work across Australian, state and territory governments, industry, research institutions and community groups to implement system improvements that will efficiently and effectively manage biosecurity risk. We recognise our important leadership role in Australia’s biosecurity system, which is reflected in formal structures such as the National Biosecurity Committee and National Management Group for emergency responses.

Our work under this strategic action will include:

* collaborating with our key partners, including those across the Australian Government, to implement the National Biosecurity Strategy (NBS)
* working with state and territory governments to ensure national biosecurity agreements, legislative frameworks, infrastructure and system funding remain fit for purpose
* increasing our efforts with importers and the logistics sector to deliver more integrated business process solutions
* delivering more seamless at-border outcomes and streamline clearance processes through greater operational collaboration and information sharing with border agencies and port authorities
* working toward fully integrating our biosecurity systems with government and industry partners
* supporting efforts to deliver joined-up product and transport tracing capability within Australia that allow rapid responses to exotic pest and disease detections and assurance for overseas trading partners
* partnering with governments, research organisations, industry and community groups to grow and better align biosecurity research (e.g. partnering with CSIRO on the [Catalysing Australia’s Biosecurity initiative](https://www.agriculture.gov.au/biosecurity-trade/policy/catalysing-australias-biosecurity)).

#### Expand offshore assurance arrangements and overseas supply chain integration

Addressing biosecurity risks offshore prevents incursions and minimises the scale and cost of border interventions. We will implement a range of initiatives to increase offshore compliance with our import requirements while supporting faster clearance of commodities at the border where it is safe to do so.

Our work under this strategic action will include:

* expanding our offshore treatment provider assurance programs focusing on priority hitchhiker pests and building on existing arrangements such as those in place for brown marmorated stink bug and khapra beetle
* accrediting further quality control systems for higher-risk overseas ports
* implementing additional supply chain assurance systems for trusted importers and major commodity pathways
* increasing our integration with importer digital supply chains starting with system solutions to support more seamless use of industry data
* championing efforts towards greater international awareness of hitchhiker pests, the need for an internationally accepted sea-container hygiene standard, improved container design and global container tracing with a focus on reducing movement of hitchhiker pests
* continuing our implementation of targeted, risk-based assurance and compliance frameworks, backed by enhanced intelligence, data analytics and system investment, and appropriate penalties for non-compliance.

#### Increase partnership activities with Australia’s near neighbours

Globally, the threat from pests and diseases is increasing. Mitigating biosecurity risks before they reach Australia is as important as supporting neighbouring countries in their efforts to grow their economies and protect their environment. Building on our established relationships, we will partner with neighbouring countries to improve regional capability to identify and manage biosecurity risks. We are committed to working with international bodies to strengthen global and regional biosecurity frameworks and practices.

Our work under this strategic action will include:

* increasing Indo-Pacific regional engagement to raise collective awareness about current and emerging biosecurity threats
* supporting near neighbours, with a focus on Indonesia, Papua New Guinea, Solomon Islands and Timor-Leste, to build their pest and disease surveillance, preparedness and response capability
* working together with the Department of Foreign Affairs and Trade and Pacific Island Countries on bilateral biosecurity partnerships to build their pest and disease surveillance, preparedness and response capability
* expanding support to near neighbours to establish and meet other importing country requirements through information sharing, training and technical assistance to benefit their economies
* strengthening national, regional and global engagement with key bodies such as the [World Organisation for Animal Health](https://www.woah.org/en/home/), the [International Plant Protection Convention](https://www.ippc.int/en/), [Food and Agriculture Organization of the United Nations](https://www.fao.org/home/en), including the:
  + [Codex Alimentarius](https://www.fao.org/fao-who-codexalimentarius/en/)
  + [Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Service](https://www.ipbes.net/)
  + [Pacific Community](https://www.spc.int/)
  + Quarantine Regulators Meeting forum.

#### Invest in a skilled and responsive workforce supported by improved regulatory tools and information

Our staff, and people working under third-party arrangements, are critical to managing biosecurity risk. As biosecurity threats change and grow, and technology offers new ways of doing business, our workforce needs to be equipped to respond. We will grow the capacity and skills of our workforce together with the critical supporting regulatory tools and information systems they need to do their jobs well. This will increase our effectiveness, responsiveness and resilience as a regulator.

Our work under this strategic action will include:

* refreshing our regulatory frameworks, policies, practices and training, while strengthening our connection to national regulatory communities of practice
* building our technical, scientific, strategic intelligence and analytics capability, including establishing a pipeline for future needs and through a dedicated workforce strategy and action plan
* growing a culture of data-driven decision making and invest in effective collection and use of quality data, information and intelligence to support risk-based decision making
* continuing our digital transformation to support regulatory outcomes and efficient workflow management
* recognising the unique biosecurity risks of Northern Australia and strengthen our approach in this region, including the [Indigenous Rangers Biosecurity Program](https://www.agriculture.gov.au/biosecurity-trade/policy/australia/indigenous-ranger-biosecurity-program)
* routinely assessing our legislation ensuring it remains fit for purpose, propose amendments as needed and strengthen compliance and enforcement action
* delivering improved transparency for the Australian Government’s biosecurity revenue and expenditure, including our efforts to deliver on the actions in this roadmap.

#### Adopt advancements and innovations in detection technologies, risk assessment and business practices

New and emerging technologies bring opportunities to evolve how governments and industry operate. We will continue to explore and adopt these tools and ways of working, in partnership with industry and others to help us mitigate biosecurity risks and improve system efficiency.

Activities under this strategic action will include:

* continuing our biosecurity innovation program, and implement our learnings to date, with a priority focus on technology, systems and practices to manage risks associated with containerised sea cargo and travellers
* building our investment in auto-detection screening technology across international traveller, mail and air cargo pathways, offering increased and more accurate inspection rates
* adopting new detection technology, laboratory information and quality management systems to support rapid, reliable and accurate border diagnostics
* increasing our research, validation and adoption of new diagnostic techniques, supporting faster and more accurate border clearance, incursion response efforts and capability of system partners
* exploring the role and opportunities presented by citizen science
* strengthening technology-driven surveillance and detection efforts, including using remotely operated vehicles and automated image capture to detect biofouling on vessels
* investigating opportunities for our biosecurity operations to incorporate automation and machine learning, in line with legislative frameworks.

#### Generate a stronger shared responsibility and commitment to biosecurity by enhancing awareness and understanding

Everyone has a part to play to protect Australia’s economy and environment from biosecurity risks. We will seek to improve engagement, awareness and understanding of biosecurity risks across the Australian community and business sectors.

Our work under this strategic action will include:

* implementing an overarching biosecurity communication and engagement strategy to build awareness about the impact of exotic pest and disease incursions and ways everyone can help support our biosecurity system
* building awareness, networks and response capability with import and export supply chain stakeholders here and overseas
* building stronger links with the broader business community to build their understanding of the potential impacts of biosecurity risks across the economy and environment, and how they can contribute to prevention, preparedness and response
* better engagement with the community to support effective communication and a shared role in biosecurity
* rolling out data-driven targeted campaigns around specific pests and diseases
* evolving an active, accessible and informative [national biosecurity](https://www.biosecurity.gov.au/) website for industry, community and environmental biosecurity issues.

#### Increase use of offshore intelligence, research and data to support risk-based interventions, preparedness and response

We will build our overseas strategic and operational intelligence, and associated analytics capability. This will assist us to quickly identify current and emerging trends and risks to inform future planning, ensure timely and appropriate border assurance and interventions and support preparedness planning, including for possible incursions.

Our work under this strategic action will include:

* accessing and using more offshore information, data and intelligence, including container movement data, scientific intelligence and web scraping in our risk analysis and decision making
* strengthening global and regional networks and systems for biosecurity stakeholders to share information and intelligence on threats
* remaining at the forefront of understanding the changing global distribution of priority pests and diseases, including zoonotic diseases, through research and modelling
* continuing to collaborate with colleagues across the Australian Government to enhance overseas risk identification, intelligence generation and information sharing.

#### Lift our national preparedness, resilience and response to exotic pest and disease incursions and strengthen our national leadership role

The biosecurity threats to Australia will continue to change. In our leadership role for national biosecurity, we will invest in prevention, preparedness, resilience and response planning, and arrangements to help minimise potential impacts and disruptions. We will do this in partnership with other Australian Government agencies, jurisdictions and industries.

Our work under this strategic action will include:

* maintaining and updating preparedness plans as appropriate for priority exotic pests and diseases, supported by enhanced simulation modelling capability to inform surveillance and response planning
* establishing further detection and incursion response capability within Australia, including a near-border response policy with states and territories
* activities, including simulation exercises, to stress test the national biosecurity system readiness and ability to respond to a significant incursion
* supporting industry and allied sector preparedness
* strengthening national pest and disease surveillance approaches, and better integrate programs and information systems of government and industry where possible
* developing nationally consistent port monitoring arrangements for biofouling
* increasing diagnostic capability and capacity for priority environmental pests and diseases
* monitoring current and historical data and trends in pest and disease outbreaks in Australia to inform our preparedness activities
* supporting effective control tools for on-ground management of exotic pests and diseases established in Australia, including national and regional coordination.

#### Align our funding and investment model to emerging system needs

Governments, businesses and community groups invest in Australia’s biosecurity to protect our collective interest in avoiding and mitigating the considerable and ongoing costs associated with exotic pests and diseases. For the Australian Government, the establishment of a sustainable biosecurity funding model ensures importers are paying the full cost of the biosecurity services they receive. We have also introduced increased and predictable funding for other non-cost recovered activities.

We will continue to ensure investment strategies are fit for purpose and sustainable for the long-term and work with biosecurity partners across the system on options for further funding reform.

Through our work under this strategic action, we will:

* regularly assess broader underlying system cost and efficiency drivers
* annually review our cost recovery arrangements, including for consistency with Australian Government and international trade policy and law
* consult with stakeholders via the Sustainable Biosecurity Funding Advisory Panel on priorities for allocation of our biosecurity funding
* continue to investigate options to mature co-funding and investment strategies with key system partners, to build the strength of the national system.

### Alignment to the National Biosecurity Strategy

The Roadmap’s strategic actions align directly to the 6 priority areas of the National Biosecurity Strategy (see Table 1).

Table 1 Connecting the DAFF Biosecurity 2030 Roadmap to the National Biosecurity Strategy

| DAFF Biosecurity 2030 Roadmap strategic action | National Biosecurity Strategy priority area |
| --- | --- |
| Accelerate our efforts with key partners to create a strong, future-orientated and efficient national biosecurity system and to better promote our leadership role | 2 – Stronger partnerships  6 – Integration supported by technology, research and data |
| Expand offshore assurance arrangements and overseas supply chain integration | 2 – Stronger partnerships  6 – Integration supported by technology, research and data |
| Increase partnership activities with Australia’s near neighbours | 2 – Stronger partnerships |
| Invest in a skilled and responsive workforce supported by improved regulatory tools and information | 3 – Highly skilled workforce  6 – Integration supported by technology, research and data |
| Adopt advancements and innovations in detection technologies, risk assessment and business practices | 6 – Integration supported by technology, research and data |
| Generate a stronger shared responsibility and commitment to biosecurity by enhancing awareness and understanding | 1 – Shared biosecurity culture |
| Increase use of offshore intelligence, research and data to support risk-based interventions, preparedness and response | 5 – Coordinated preparedness and response  6 – Integration supported by technology, research and data |
| Lift our national preparedness, resilience and response to exotic pest and disease incursions and strengthen our national leadership role | 5 – Coordinated preparedness and response |
| Align our funding and investment model to emerging system needs | 4 – Sustainable investment |

## Our operating environment

For thousands of years, Australia’s natural assets and ecosystems have shaped the way of life for its people. First Nations people are the first farmers, fishers, foresters and scientists whose custodianship, knowledge and understanding of Australia’s lands and waters extends over 60,000 years. Over generations, First Nations people have cared for and protected Country, lived sustainably with the land, adapted and shaped changing landscapes, and traded domestically and internationally. We are committed to strengthening the crucial role of Indigenous ranger groups in Australia’s biosecurity protection system.

Australia’s success continues to be built on its natural resources and ecosystems.

As other countries experience their own biosecurity challenges, Australia’s maintenance and continual improvement of an effective biosecurity system has never been more important. Our biosecurity system protects:

* agricultural, forestry and fisheries industries worth approximately $90 billion
* a tourism sector worth approximately $60 billion
* more than 1.6 million jobs
* environmental assets that are irreplaceable.

Our operating environment continues to evolve and is shaped by both strategic and operational drivers.

### Our 3 focus areas

Biosecurity is a series of measures to protect against the entry and spread of pests and diseases. To protect Australia, we apply biosecurity measures:

* pre-border
* at the border
* post-border.

Across these 3 focus areas we undertake a range of policy, operational and compliance functions supported by a series of third-party agreements, authorisations and programs, together with research, intelligence and data analytics. We also implement a range of education, awareness and communication campaigns on the importance of biosecurity, the impact of exotic pest and disease incursions and how everyone can play their part to support a strong biosecurity system.

Pre-border (overseas) activities focus on working with foreign governments and agencies, importers and other stakeholders to mitigate risk and reduce the number and frequency of exotic pests and diseases that reach Australia. This work can include developing international standards, assessing offshore risks, establishing pre-border assurance programs, conducting import risk analysis and building capability in neighbouring countries.

At the border activities involve screening and inspecting vessels (air and sea), freight, mail and passengers for biosecurity threats, as well as undertaking verification, assurance and post-entry quarantine to prevent exotic pests and diseases entering Australia.

Post-border activities include working with the states, territories and industry partners to detect and respond to incursions; plan emergency responses; and contain and eradicate exotic pests and diseases that enter or emerge in the country.

### Strategic drivers

The biosecurity operating environment will always face new and increasing challenges within our borders, our region and globally. There is also a range of new opportunities, with both challenges and opportunities extending beyond a narrow focus on biosecurity in isolation.

#### Geopolitical factors, evolving supply chains and a return to high traveller numbers

The impacts of international changes are keenly felt within Australia and directly influence how our biosecurity system needs to function to be effective. These changes include increasingly complex economic and political relationships, significant economic and population growth across the Indo-Pacific, and new and changing trade agreements between nations. Trade patterns and their associated supply chains are shifting, impacting how and when goods come to Australia, and the risks they might be bringing.

Australia has a global reputation for delivering high-quality and safe agricultural goods, which is underpinned by its natural environment and our success at keeping many threats from exotic pests and diseases at bay. Australia’s strong biosecurity system enables the agricultural sector access to premium export markets and integration with international supply chains. High levels of biosecurity regulation mean we can facilitate both imports and exports of products safely and enhance Australia’s influence and status internationally as a trade partner of choice.

The increasing global population and growing middle class are resulting in shifts in consumer demands in our export markets, with the likelihood of further scrutiny on traceability and sustainability, including our biosecurity settings, for Australian produce. The ‘bounce back’ of travel after the COVID-19 pandemic is also resulting in a return to high incoming passenger numbers to Australia.

#### **Climate change**

#### The impacts of climate change are altering the range and impact of pests and disease. Australia’s isolation is the basis of its unique natural environment and has been a fundamental asset to preserving the country’s natural resources from offshore risks. However, altered seasonal weather patterns due to climate change are creating the potential for invasive pests and diseases to spread to, and further within, Australia.

#### Biodiversity loss

#### Invasive species are one of the greatest threats to Australia’s biodiversity. The management costs and impacts are substantial in value and underscore the priority for Australian biosecurity to prevent harmful species establishing a presence. Growing human populations in Australian towns and cities require increased land for built infrastructure, often outcompeting other land uses and creating new habitats where invasive species can establish and expand further.

#### One Health

[One Health](https://www.cdc.gov.au/about/what-we-do/one-health#:~:text=Key%20stakeholders-,What%20is%20One%20Health%20and%20why%20is%20it%20important%3F,people%2C%20animals%20and%20ecosystems%E2%80%9D.) is ‘an integrated, unifying approach that aims to sustainably balance and optimise the health of people, animals and ecosystems’.

The approach is not new but has been gaining traction for over a decade as disease threats are increasingly recognised to have complex origins and require cross-sectoral solutions. One Health provides an opportunity to address these challenges from a whole-of-government and whole-of-society perspective, ensuring sustainable and equitable outcomes.

We work closely with colleagues across governments, industry, academia, non-government and community organisations to achieve collaborative solutions to disease threats using One Health approaches.

#### Stronger partnerships

Australia’s national biosecurity system continues to evolve. The agreement of the NBS in 2022 was a significant milestone, particularly in recognising the importance of partnerships between all governments, industries, environment groups, researchers and communities, including First Nations people to achieving our shared goal of a stronger national system.

Australia’s First Nations people have one of the richest and oldest continuing cultures in the world. The incursion of pests and diseases threatens this heritage through impacts on Country, culture and economic opportunities. First Nations people bring invaluable understanding of Country, science and management practices that we are committed to supporting and drawing from as we seek to improve our prevention, preparedness and response capabilities.

### Operational drivers

Our day-to-day operations are influenced by a number of operational drivers, and we undertake planning over the short and longer term to ensure we are ready to address these.

#### Workforce capability and technology

Our workforce’s capacity and expertise is essential to effectively respond to all other drivers and to deliver the outcomes expected of biosecurity. To achieve this, it is necessary to attract, develop and retain a workforce who value a career in biosecurity and are committed to meeting the challenges all within a highly competitive environment for talented staff. Technology advancements, both biosecurity specific and for novel application in biosecurity, present opportunities to strengthen and improve the risk assessment and effectiveness of biosecurity operations.

We need to adapt our workforce to enhance our adoption of technology to improve biosecurity system efficiency in the immediate context of strong competition for talented personnel and the medium-longer term context of substantial trade volume increases. This includes ensuring that we have the scientific capability to maintain our strengths in risk assessment and adoption of technology.

#### Pathways

There are 5 main pathways through which a pest or disease can reach Australia. Across each of these pathways, changes impact how we deliver our services and protect Australia’s biosecurity:

1. Cargo is considered the most complex pathway as it is divided into numerous transport modes and commodity groups including nursery stocks, live animals, fresh produce and machinery.
2. Sea vessels and aircraft can harbour hitchhiker pests and diseases within cargo containers, in the vessels or within ballast water, on vessels’ hulls (biofouling) or the aircraft themselves.
3. International travellers who enter Australia by sea or air have the potential to carry both pests and disease in the luggage and to be carriers of human-borne disease.
4. Post and mail can include pests and disease either deliberately or inadvertently.
5. Natural pathways involve pests and diseases entering Australia through the natural environment, such as wind and sea currents or the migration of wild birds. It is recognised that some pests and diseases, such as high pathogenicity avian influenza, can emerge within Australia.

To protect Australia, we must apply biosecurity measures pre-border, at the border and post-border.

In 2023–24 Australia received:

* 2.6 million containers
* 124 million cargo consignments
* 124,300 international aircraft and sea vessels
* 21.6 million international travellers.

In 2023–24 we:

* conducted biosecurity intervention on 671,400 imported containers
* conducted 623,000 cargo assessments and over 274,100 cargo inspections
* conducted 11,100 vessel inspections
* screened 7.9 million and inspected 1.3 million international travellers
* screened over 9.3 million and inspected more than 112,000 mail items.
* managed 70,699 post entry quarantine operations for cats, dogs, horses, birds and plants.
* received 154,500 calls to our national contact number and 7,300 online enquiries.

It is not feasible to inspect every vessel, container and passenger arriving in Australia. Our biosecurity system relies on risk assessment supported by technology-enabled processes to address increasing volumes and risks.

#### Deliberate non-compliance with regulatory controls

#### Transnational, serious and organised crime is a threat to Australia’s national security, including our biosecurity.

It systematically targets Australia and Australians for profit without any regard for the harm caused. Deliberate attempts to bring items that are prohibited under our biosecurity laws is an area of growing focus for us, recognising that the growth and increasing complexity of trade and online shopping has opened new pathways for deliberate non-compliance with our inbound biosecurity controls.

#### Sustainable funding for Australia’s biosecurity

A strong and sustainably funded biosecurity system is critical to protecting Australia’s economy, environment and way of life. This roadmap reflects this with a sustainable funding model identified as both a key enabler and a strategic action.

We have a complex funding model, particularly for our biosecurity functions. Funding is based on a shared responsibility between those who create risk and those who receive significant benefits from the Australian Government’s efforts at the border.

The sources of funding for our biosecurity activities include cost-recovery fees and charges for biosecurity services delivered directly to industry and individuals, revenue from Australia Post to cover the cost of biosecurity services delivered as part of international mail processing, and appropriation (taxpayer funding) to provide for key functions such as developing biosecurity policy, delivering operations that are not cost-recovered (e.g. inspections of passengers at airports), and technical functions such as much of our surveillance and science work.

In the 2023–24 Budget the Australian Government announced the Sustainable Biosecurity Funding package, providing long term, predictable and sustainable funding as recommended in a range of reviews and sought by industry and environmental groups.

The package includes more than $1 billion in new appropriation funding for the department from 2023–24 to 2026–27, with $267 million per year ongoing from 2027–28, to maintain biosecurity policy, operational and technical functions, which are not cost-recovered, on a sustainable basis.

The package also includes a revision of biosecurity cost-recovery arrangements, to ensure we recover the full cost of delivering biosecurity services. The government committed to conducting an annual review of these arrangements, to ensure fees and charges continue to fully cover our service delivery costs.

The Sustainable Biosecurity Funding package also confirmed the continuation of the Indigenous Biosecurity Ranger Program in Northern Australia, through which we partner with Aboriginal and Torres Strait Islander ranger groups to deliver monitoring for pests and diseases. The rangers play a crucial role in enhancing biosecurity, protecting Australian agriculture and the environment and supporting northern Australia, and funding for this program is locked in.

Another important element of the package was funding to uplift our incoming cargo clearance Information Communication Technology systems, via the Simplified Targeting and Enhanced Processing System program. These improvements will drive effectiveness and efficiency, for both industry and us, in the movement of goods across Australia’s border.

The changes to the biosecurity funding model represent a step-change in how we can plan and deliver the Australian Government’s biosecurity responsibilities. We will continue to review our resourcing model to ensure it is fit for purpose and delivering the most effective outcome for the national biosecurity system. This roadmap is a key input into guiding our decision-making on how to best invest our resources to meet our goal.

## Our biosecurity responsibilities

Our biosecurity activities are broad. As set out in our [Corporate Plan](https://www.agriculture.gov.au/about/reporting/corporate-plan), our objective for biosecurity is to strengthen our national biosecurity system to provide an appropriate level of protection to Australia’s people, our environment and economy from the biosecurity threats of today and tomorrow.

To deliver this objective, we focus on 3 key activities:

1. Effectively preparing for the management of biosecurity risk through pragmatic policy, fit for purpose regulation and national preparedness.
2. Effectively detecting biosecurity risk through intelligence-led targeting, technology supported inspections and efficient detection methods.
3. Minimising the impact of biosecurity incursions through appropriate post biosecurity and post-border measures.

DAFF is the national regulator of biosecurity and must make decisions and take actions within legal and operational frameworks. We administer the *Biosecurity Act 2015*, *Export Control Act 2020*, *Imported Food Control Act 1992* and various other Acts in order to protect Australia’s animal, plant and human health status and to maintain market access for Australian food and other agricultural exports.

### Who we are

Our best asset to achieve our biosecurity objectives is our diverse, inclusive, and committed workforce. Our staff work across a range of diverse roles right across the nation and our responsibilities intersect with nationally significant economic and social issues. Our work directly and indirectly impacts the lives of all Australians, particularly those living in regional and rural areas. As One DAFF, we work together as an integrated whole.

We recognise the important role First Nations people play in both our workplace and biosecurity system. Our work relies on the rich knowledge of First Nations people, and we are committed to collaborating with First Nations communities. We prioritise Aboriginal and Torres Strait Islander perspectives in our work and actively seek to attract, recruit and develop First Nations staff.

Our highly skilled and experienced staff’s efforts are complex, interconnected and include:

* assessing importer documentations, responding to public and industry group enquiries, inspecting imported goods, undertaking surveillance and assurance activities across airports, seaports, mail centres, the Post Entry Quarantine facility and other premises throughout Australia and offshore territories
* delivering nationally integrated biosecurity operations and imported food regulatory activities to ensure goods, conveyances and travellers meet Australia’s import requirements
* working closely with international trade industries, their representatives, and a range of departmental stakeholders to ensure the delivery of effective and efficient biosecurity regulation
* providing quality, evidence-based policy advice aimed at improving and strengthening the national biosecurity system
* providing scientific analysis and technical advice, facilitating the safe importation of goods and containers, and arrival of aircraft and ships in Australia, improving and implementing standards and systems, market access, capacity building and stakeholder engagement
* conducting surveillance and response at first points of entry and approved arrangements sites nationally, and delivering plant, animal, and aquatic health surveillance across Australia
* working closely with communities and Indigenous rangers, enhancing our biosecurity capability in northern Australia and the Torres Strait
* working with counterparts overseas, including in near neighbouring countries, to build their biosecurity capacity and reduce pest and disease risks
* working to minimise the impacts of current and emerging biosecurity risks to Australia’s agricultural production and trade, environment, Indigenous and cultural heritage, and associated amenities.

### Our Core 4 values

[Our Core 4 values](https://www.agriculture.gov.au/about/jobs/conditions) are embedded in departmental culture, defining the quality of our workforce, and consistently reflected and delivered through our activities. With a diverse and dispersed workforce, we focus on collaboration and the One DAFF approach to our work.

1. Working together – We look after each other, work as a team and actively engage and collaborate with internal and external stakeholders.
2. Courage – We innovate, engage with risk, identify and learn from our mistakes.
3. Diversity – We are inclusive and listen to and draw on expertise.
4. Excellence – We accept personal responsibility for our work and use data and research to make well-informed decisions.

We will work as One DAFF to grow Australia together.

## Preparing for tomorrow and beyond

Australia’s biosecurity system operates in a complex environment, facing an array of diverse exotic pests and diseases, and our challenges and opportunities will continue to evolve. We know that simply increasing investment in intervention (e.g. by adding more people doing the same tasks as today) will not be the most effective approach to managing our risks. We must continue to innovate to meet our obligations in protecting Australia.

The biggest challenges that we must solve within our biosecurity system include:

* our technology systems meeting the needs of tomorrow’s supply chains, and not just today’s
* our working relationships with Australian and foreign governments, agencies and businesses can help to reduce the pressures at the Australian border
* extracting the full value from available data helping us make better, more informed decisions, including having the necessary digital systems to access, analyse and contextualise increasing amounts and complexity of data
* achieving the right balance of capability, flexibility, tools and techniques in our current systems in the changing environment
* keeping pace with the changes in our operating environment.

Investing in research and new ways of understanding and detecting risks, sharing international resources and intelligence, and continually reviewing our risk settings will help prevent the introduction, establishment and spread of pests and diseases in Australia.

## Transparent and effective reporting

### Governance and oversight

Delivery of our biosecurity responsibilities operates with our broader internal governance arrangements and a range of external scrutiny mechanisms including the Australian Parliament, the Australian National Audit Office and the Inspector-General of Biosecurity. Findings and recommendations from these and other reviews inform our forward work programs.

### Reporting progress

Our [Corporate Plan](https://www.agriculture.gov.au/about/reporting/corporate-plan) sets out our intended actions and performance measures for the coming financial year. We report on the outcomes, including performance information, for each financial year in our [annual reports](https://www.agriculture.gov.au/about/reporting/annual-report).

As part of the [Sustainable Biosecurity Funding](https://www.agriculture.gov.au/biosecurity-trade/policy/sustainable-biosecurity-funding) measure, the Australian Government has established the Sustainable Biosecurity Funding Advisory Panel to increase transparency and accountability for the department’s biosecurity activities and investments. The Australian Government also committed to a yearly public report (separate from our Annual Report) on the department’s biosecurity revenue and expenditure.

We will include our progress against this roadmap in our yearly biosecurity revenue and expenditure report. This will include information on deliverables or outcomes over the reporting period and their connections to the 9 [strategic action](#_Strategic_actions).

This will allow those interested in the effectiveness of Australia’s biosecurity to have improved visibility over government efforts. The Sustainable Biosecurity Funding Advisory Panel will facilitate feedback on how we can allocate our resourcing to deliver the Roadmap’s activities, and on opportunities for improvement in the system more broadly.