



Case Study



**Australian Government**  
**Department of Agriculture,  
Fisheries and Forestry**

# Protecting Australia's people, environment and economy from exotic pests and diseases

**Do what matters**

## CASE STUDY

Protecting Australia's people, environment and economy from exotic pests and diseases

Biosecurity officers at airports across Australia now have increased measures to effectively and accurately assess and detect potential biosecurity risks, including exotic pests and diseases.

The Department of Agriculture, Fisheries and Forestry (DAFF) has replaced its manual screening and inspection system with digital processing for scanning passports and communicating outcomes for incoming passengers in real time.

DAFF has recently rolled out the Traveller and Mail System (TAMS) mobile and desktop app, which are used to record outcomes of assessments, inspections, and goods and non-compliance activities digitally. Biosecurity officers managing biosecurity risk and regulatory data now have increased ability to protect Australia's people, environment, and precious resources while facilitating streamlined processes for compliant passengers.

### Inspiring change: The importance of biosecurity

If you've traveled internationally, you're aware of customs declaration forms or incoming passenger cards. Whether it's the paper version you complete on the plane or at an electronic airport kiosk upon arrival, you'll be asked standard questions to identify what you're bringing into the country. These include questions about fresh fruits and vegetables, meat and other animal products. Have you ever wondered why?

In an era where the global community is more interconnected than ever, the importance of stringent biosecurity measures can't be overstated. For an island nation like Australia, safeguarding its environment is paramount.

"Australia prides itself on its unique natural environment, and we all have a duty to protect our land and seas from the arrival of new pests, weeds and diseases. This can destroy people's livelihoods, so we take biosecurity measures very seriously. Innovation and digital reform are a key priority to ensure biosecurity processes are streamlined and focused on managing high risk," explains the deputy secretary, biosecurity and compliance at DAFF.

Analyzing biosecurity risks and closely monitoring people and goods entering the country is so important to ensuring that Australia's biosecurity risks can be appropriately managed. Once passengers have filled out their incoming passenger cards – and if they have something to declare – they meet with a biosecurity officer for assessment. Traditionally, this screening was conducted using manual systems and processes. It was often time-consuming and slowed down passengers' entry into the country.

**Company Name:** Australia Department of Agriculture, Fisheries and Forestry (DAFF)

**Country:** Australia

**Industry:** Government & Public Services

**Solutions:** Microsoft Dynamics 365, Microsoft Power Apps, Microsoft Azure Integration Services

To keep up with changing and increased global trade, traveller habits and ever-evolving biosecurity risks, a solution to streamline biosecurity processes at the airport was sought.

To better support the regulatory responsibilities of biosecurity officers and improve the department's risk management at the border, DAFF partnered with Avanade to modernize TAMS.

**"A key business requirement was to ensure our staff are mobile-enabled, due to the nature of their roles in airports, from assessing in baggage hall, through to screening and inspection activities at the benches. Giving our people tools to capture comprehensive data and provide real-time decision support is vital in truly improving biosecurity regulation processes."**

**– TAMS Product Owner  
Biosecurity Operations Division, Australia Department of Agriculture, Fisheries and Forestry**

### Driving innovation: There's an app for that

Together, we developed a mobile and desktop application for TAMS to replace outdated systems and improve processes for biosecurity and compliance officers with a powerful tool that enhances efficiency, effectiveness and accuracy.

This app was developed using a mix of Canvas and Microsoft Power Apps working seamlessly with Microsoft Dynamics 365 CE CRM, an iOS Native application and Microsoft Azure Integration Services to integrate with existing departmental systems.

"The Traveller and Mail Modernization program required multiple skills and input from architecture, developers, testers, policy, operations and delivery. Avanade and DAFF

worked as one team, no matter which area the staff came from. Scope, timeline, and budget parameters were all met because of the integrated team trusting each other and having a common drive and passion to succeed," says the technical program director, biosecurity digital reform at DAFF.

The first phase of the project was developing an app that helps expedite the arriving passenger screening process:

- Every passenger entering the country is subject to assessment, and those presenting with a potential biosecurity risk will interact with a biosecurity officer who is using TAMS.
- Officers use their mobile device to securely scan passports and assess passenger risks. Data is stored within the backend system.
- Based on a passenger's responses, they can be cleared for entry at this point or flagged for further screening, including any notes captured by the initial assessment.

In addition to this app, we're currently working with DAFF to develop another application for screening incoming mail and parcels. This will further enhance the country's biosecurity measures.

## **Achieving what matters: Easier entry into a better protected environment**

The TAMS mobile app is now being used by nearly 500 biosecurity officers across eight Australian international airports, with TAMS desktop functionality for inspections live in six airports and two more to follow. These tools are already yielding important benefits, including:

- Improved workflows and increased data consistency: Biosecurity officers can use the integrated passport scan function to reduce manual data entry work and errors.
- With the app, they can also record inspection and non-compliance results in real-time, simplifying reporting and enabling more efficient operations.
- Streamlined entry for compliant passengers: With an easier process, people can get where they need to go faster, while officers can focus intervention activities on high-risk arrivals.
- As biosecurity officers operate in many locations across the international airport, officers can now digitally communicate with each other using TAMS, further facilitating efficient risk assessment and outcomes.
- Increased responsiveness to emerging threats and needs: With real-time, quality data, DAFF has stronger intelligence and can better manage biosecurity risks as they arise.

TAMS users have embraced the technology, noting pre-population of fields is an important aspect for efficiency gains, particularly for more complex infringement outcomes. In the words of a biosecurity officer at Brisbane airport, "It was ridiculously easy."

With this program, DAFF is demonstrating the many ways technology can be used to protect and preserve the natural world around us by digitizing Australia's biosecurity processes.

Watch out for the app in action the next time you travel back into Australia.

## **About the Australia Department of Agriculture, Fisheries and Forestry (DAFF)**

DAFF works to support our agriculture, fishery, food and forestry industries, so they remain competitive and sustainable.

A strengthened biosecurity system provides ongoing protection to Australia's people, our environment and economy from the biosecurity threats of today and tomorrow.





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**About Avanade**

Avanade is the leading provider of innovative digital, cloud and advisory services, industry solutions and design-led experiences across the Microsoft ecosystem. Every day, our 60,000 professionals in 26 countries make a genuine human impact for our clients, their employees and their customers. Avanade was founded in 2000 by Accenture LLP and Microsoft Corporation. Learn more at [www.avanade.com](http://www.avanade.com)

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