

# Situation Overview— Biosecurity at New Zealand's Airports

September 2013

## Purpose

A summary of how biosecurity operates at New Zealand's airports for the purpose of understanding risk that this pathway presents to the kiwifruit industry and to determine if current levels of protection are sufficient to mitigate this risk.

## Background

In the 2012-2013 financial year, 4.9 million passengers entered New Zealand on international flights; an average of more than 400,000 arrivals per month and an increase of 178% since 1990. This increase is expected to continue at a rate of 2.9% per annum to 2019 (Ministry of Economic Development). New Zealand's three largest airports account for 97% of all arrivals, Auckland (74%), Christchurch (16%), and Wellington (7%), and other airports receive the remaining 3% which are mostly passengers on trans-Tasman flights.

The Ministry for Primary Industries (MPI) performs two activities on the passenger pathway. The first is to manage declared risk goods in accordance with the relevant Import Health Standards (IHS). The second activity is to detect undeclared risk goods using a range of interventions to achieve this goal. From 2001, MAF was required to physically search or X-ray screen 100% of international air passenger baggage on arrival into New Zealand. However, as air passenger numbers increased, this requirement became increasingly resource-intensive and was considered to be an inefficient use of resources as 96% of arriving passengers were not carrying risk goods requiring action. In 2009, this requirement was replaced with a more targeted risk-based approach to assessing biosecurity risks, which also aimed to facilitate the processing of low risk trans-Tasman passengers. A risk-based targeted approach is intended to provide faster exit times for most passengers and enable border agency resources to focus on high risk pathways, while still having the potential for intervention on all passengers including those flagged as low risk. Implementation of the targeted approach resulted in the requirement for all passengers to be inspected, being replaced with a compliance output standard; that MPI must be able to demonstrate that 98.5% of all passengers are compliant with biosecurity requirements by the time they depart the airport.

## Passenger Processing Model

The targeted risk-profiling system works as follows (see MPI processing model, Appendix 1). A variety of measures are used in the process, including awareness material, inflight announcements, arrival cards, amnesty bins, risk assessment, X-ray machines and full searching.

Prior to arrival, alerts are placed on known offenders or passengers who have infringed previously, and these passengers may be directed to the full-search area. All passengers are exposed to communications describing biosecurity requirements to encourage voluntary compliance. Upon arrival, passengers will have the opportunity to dispose of risk items in amnesty bins and some flights will also be screened by detector dogs. All passengers are then assessed by a Quarantine Inspector and will either be referred to full-search, X-ray, item search or if eligible may be cleared to use direct exit. Since late October 2010, passengers have been processed in two segments: relatively low-risk NZ/AU passport holders, and higher-risk Rest of World (RoW) passport holders. The NZ/AU passenger segment is risk assessed, but can

potentially exit the airport without having their luggage X-ray screened (direct exit). To ensure that direct exit decision making is effective, a subset of passengers from direct exit are redirected to x-ray screening. Detector dogs are at times available to screen passengers in direct exit at Auckland and Christchurch International Airports, but not Wellington. However, MPI are deploying a dog there in the future.

## **Performance Criteria for Airports**

MPI have a performance standard that 98.5% of passengers comply with biosecurity requirements by the time they depart the airport.

## **Compliance monitoring—how they are meeting the criteria**

MPI audit and report on their performance in meeting compliance rates for the three largest airports but do not undertake a similar approach for smaller airports due to their concerns that the low numbers of passengers make the sample number too small for meaningful analysis.

To measure passenger compliance, surveys are conducted by MPI staff at Auckland in January and February each year, and combined with compliance data gathered on an on-going basis in Christchurch and Wellington. However, over the past two years passenger compliance was measured using a survey at all three airports between May and June. Over the 2012-2013 survey period between 6 May and 21 June 2013, there were 155,124 arrivals of which 4.4% (6816 passengers) were included in the survey.

In 2013 the target of 98.5% overall compliance was not met at any of the three airports Auckland (97.1%), Wellington (96.6%), and Christchurch (96.4%). Christchurch has the poorest compliance record of these airports for the second year in a row but has made improvements in response to 2012 compliance survey recommendations.

Previous estimates nationwide suggest that 96% of passengers arrive with no goods of biosecurity interest, or with complying risk goods. Compliance rates of 96.6 % and 96.7% represent only a slight improvement in protection from this baseline rate. However, slippage at all three airports is predominantly items considered low-risk such as used equipment, although these items could still carry plant pathogens potentially harmful to the kiwifruit industry. When low risk items are excluded, compliance rates for medium to high risk goods in all three airports exceed the compliance target of 98.5%.

Fresh produce is a high risk item that accounts for almost 5% of total slippage. This is a concerning statistic when applied to the large number of passengers arriving at Auckland Airport, which is only a two hour drive from the Bay of Plenty. If Auckland receives 74% of all arriving international passengers, or 3.6 million of the 4.9 million arrivals in 2012 - 2013, and if MPI meets its target of 98.5% compliance, 54,000 passengers will leave the airport carrying a risk item. Statistically, most of these risk items will be used equipment, but 5% of these (2700) will leave carrying fresh produce every year.

MPI implemented the risk-based targeted approach to better utilise resources, and a key performance measure is how compliance compares for the low risk direct exit passengers, against compliance for higher risk passengers who are subject to closer inspection. Nationwide 44% of passengers use direct exit, with Wellington having the highest level in 56% of arriving passengers using direct exit, predominantly due to the flights being Trans-Tasman and having a higher portion of the NZ and Australian passport holders being eligible to use direct exit. X-ray screening covers 42.5% of all passengers, 4 % have an item inspected and then exit, 8% have an item inspected and then X-rayed and 1% are subject to a full inspection. Direct exit passengers receive the lowest level of intervention, yet across all three airports this exit category achieved the highest slippage monitoring compliance rate for all risk items (97.8%), and second highest for medium to high risk items (99.4%) behind “item inspection then exit” (99.5%). This is evidence that MPI’s risk profiling system and targeting resources towards high risk passengers are effective.

MPI’s failure to meet the target compliance rate is not a result of risk profiling but rather intervention measures failing to detect risk items. Slippage of low risk and medium-high risk items is occurring in passengers that have been subject to X-ray or full inspection. In 2012 full inspection achieved 93% compliance for all risk items, 100% in Wellington, 96% in Auckland and only 86% in Christchurch. This is particularly concerning as passengers directed to full inspection are considered high risk, and therefore

slippages from these passengers are more serious than the low risk direct exit passengers. As a result of these poor full inspection results in 2012, MPI conducted staff competency reviews and refresher training and achieved 97.2% compliance for full inspection in 2013, an improvement but a result that is still unacceptable given the high risk profile of these passengers. Data on full inspection compliance by airport has not been provided in the 2013 compliance reports.

X-ray is another key intervention tool for border control however this measure has failed to meet compliance targets in either 2012 (94.2%) or 2013 (96.9%). A more detailed analysis of the 2013 report indicated that of these non-compliant passengers, 52 % had risk items that were X-ray detectable but still managed to pass undetected. From October 2013, MPI will be replacing X-ray machines in these airports, with new machines believed to improve the detection of risk items through improved image quality and enhanced functionality.

The 2012 and 2013 surveys were conducted in winter, whereas previous surveys were conducted in summer and had higher compliance rates. Therefore there may be season effects and MPI acknowledge the need to deliver a more consistent approach to border monitoring, although there may also be a need to conduct slippage monitoring year round to detect seasonal effects that might otherwise not be apparent.

Finally, it should be noted that in 2013, the social research agency Colmar Brunton conducted an independent review of MPI's compliance surveys and found the methodologies used to be robust. This indicated compliance estimates should be representative of the actual situation occurring in each airport during the survey period.

# Appendix 1

Current MPI passenger processing model

