

# Air New Zealand Readies for RFID-enabled Boarding Passes

At 26 airports throughout the country, the airline's frequent flyers will use the permanent, reusable boarding passes to check themselves in, enter passenger lounges or board a flight.

By Dave Friedlos

Nov. 28, 2008—[Air New Zealand](#) passengers will soon be able to breeze through check-in and boarding at all of the domestic airports it serves, following the introduction of RFID-enabled technology.

The international carrier is spending more than NZ\$30 million (US\$16.5 million) to install 112 new high-tech kiosks and 84 gate scanners at 26 airports, and will become one of the first airlines in the world to offer RFID-enabled self-scanned check-in and boarding services. The company's aim is to reduce bag-check queues and customer waiting times, and to make boarding as simple as possible without the need for paper documents.

This month, Air New Zealand replaced 14 self-service check-in kiosks at [Auckland Airport](#) with 30 new kiosks containing RFID interrogators. New kiosks were also installed and began operating last week at [Christchurch Airport](#), with [Wellington International Airport](#) set to follow in December. Smaller airports around the country are slated to be upgraded by January 2009.

The airline's chief information officer, Julia Raue, says the RFID-enabled ePass has been issued to 100,000 Air New Zealand Gold Elite, Gold and Silver Airpoints customers, as well as members of the airline's Koru Club, to provide these regular travelers with a permanent and reusable boarding pass.

"The new RFID ePass is one of a range of initiatives launched as part of a multimillion-dollar investment to transform the check-in and boarding experience," Raue says. "We wanted to utilize new technology to meet the needs of customers, and offer different ways of checking in and obtaining a boarding pass."

The ePass is similar in size to a small bar-code sticker. Passengers have been encouraged to attach tags to their mobile phones, then to use their mobile device at the kiosks or departure gates upon checking in and boarding, or to enter passenger lounges.

The 13.56 MHz high-frequency passive tags comply with the ISO 14443 RFID standard, and have been designed by Israeli company [On Track Innovations](#) (OTI), specifically for use on mobile phones. The tags have a ferrite backing to shield them, and to prevent interference with mobile signals.

The RFID interrogators have been supplied by Air New Zealand's kiosk manufacturer, [IER](#). The ePass is activated only when within 2 to 3 centimeters (0.8 inch to 1.2 inches) of an interrogator, to ensure there is no interference with other nearby mobile signals and applications.

The ePass is secure, Raue says, as it contains no personal information—only a unique number sequence and tag identifier. When an ePass' tag is scanned at the departure gate, data regarding that specific passenger—held separately in Air New Zealand's IT system—is used to verify that customer. Without such verification, the individual will not be allowed to board the flight.

"The tag will only enable access to the lounge or gate if there is a valid booking for the customer on that day," Raue says. "It is unlikely to be used fraudulently, as the customer would also present themselves at the airport, which would highlight the issue via an error at the kiosk, gate or lounge. And as the tag holds no personal details, it does not enable access to flight-booking data." If Air New Zealand is notified of a stolen ePass, she adds, its tag will be disabled and a new ePass will be issued to the customer.

Passengers will also be able to utilize the ePass to check their baggage at the kiosks, then place it directly onto the conveyor belt without waiting for employees to enter bag details manually. Passengers can simply scan their ePass tag at the check-in kiosk, where flight and baggage details are matched and a paper boarding pass is printed with standard boarding pass data and a bar code (the paper boarding pass is issued in case it is needed for security purposes). A baggage tag is also printed, and the passenger can attach the tag to his or her luggage, then place the bag on the conveyor belt and continue to the departure gate or customer lounge.

According to Raue, the ePass amounts to a permanent and reusable boarding pass, and will provide a number of benefits to frequent Air New Zealand flyers. "There are clear benefits for our customers in the speed through which they will be able to get through the airport, and the simplification of check-in and boarding transactions," she says. "The solution is elegant and high-tech, and the initial customer reaction to the ePass product has been fantastic. We will continue to monitor, track and report customer uptake."

The ePass is currently available only to frequent Air New Zealand passengers, but another service, mPass, is available to all passengers. To use this service, customers must download a special Java application, designed by Air New Zealand's IT Innovations team, to their mobile phone. A boarding pass is downloaded to the phone when customers access the application in real time, and can then be scanned at the kiosk or gate.

The ePass is part of a technology transformation at Air New Zealand's domestic airports, Raue says, noting that the carrier spent months assessing RFID systems around the world to understand its use in transportation systems, and at airports worldwide.

The RFID tags were initially tested on the access control systems at Air New Zealand's head office, Raue says, to give it confidence in the tags' durability. As part of its standard application development, the airline then carried out extensive testing using the new kiosk and RFID interrogators at the departure gate. The Auckland Airport rollout, earlier this month, went smoothly, she says.

"We are confident that we have the best solution in place to deliver a fantastic experience to our domestic customers," Raue states. She assures customers that security has not been compromised through the introduction of RFID and mobile phone-enabled boarding.

RELATED\_ARTICLES "We have worked in consultation with the Aviation Security Standards team at the Civil Aviation Authority of New Zealand," Raue says, "and advise our customers to retain proof of travel documentation, should this be requested."

According to Raue, the back-end IT infrastructure for RFID-enabled kiosks, lounge access and gate access is already installed. She expects all airports to be operational alongside Auckland and Christchurch by early next year.

