



# AEROPORTI DI ROMA

Wireless System Maximizes Efficiency for Automated Airport Baggage Handling System

Aeroporti di Roma (ADR) manages infrastructure and coordinates services for the Leonardo da Vinci airport in Fiumicino, Rome, Italy. An average of 70,000 passengers pass through Leonardo da Vinci airport each day, which makes ADR’s goal to constantly improve efficiency of services and maximize customer satisfaction extremely challenging.

## The Challenge

ADR’s Baggage Handling System (BHS) consisted of a complex system of scanners, conveyor racks and temporary parking zones that automatically route bar coded bags from check-in desks to flight loading bays. Though successful, the BHS system was not flexible enough to handle last minute changes to flight loading such as late check-ins or delayed arrivals which cut flight transfer times to a minimum. ADR required a system to check baggage against a central database in real-time throughout the airport from check-in desks all the way to the aircraft.

## The Solution

ADR implemented a narrowband wireless system with three Psion Teklogix wireless gateways providing coverage for the entire airport. Psion Teklogix rugged handheld computers scan and monitor baggage-in-transit at any point in the airport, and information is wirelessly sent to the central database for verification. Flight numbers and other special loading instructions are sent back to the handhelds.

## The Benefits

The Psion Teklogix system has enabled ADR to make fast and reliable last-minute changes to aircraft loading, which has helped reduce baggage delivery errors and improve flight punctuality. The Association of European Airlines (AEA) has since measured Leonardo da Vinci airport as Italy’s most punctual hub. ADR reported that baggage delivery errors have been reduced to between 0.1 and 0.2 per 1000 bags which in turn has contributed to higher levels of customer satisfaction. Research showed that over 94% of passengers have reported positive views of airport handling services.

Finally, the rugged handheld computers withstand the tough environment of the busy airport, and their ergonomic features support the way baggage-handling operatives want to work.

