



RFID IN AVIATION

How IATA supports the industry's use of radio frequency identification

Recent developments in RFID have enabled the aviation industry to benefit from this technology. While the benefits of RFID do not apply equally to all airlines and airports, the good news is that an industry-wide adoption is not necessary to benefit from RFID.

What areas has IATA investigated for the use of RFID?

IATA has examined the use of RFID in baggage handling, catering, cargo, parts and aircraft turnaround. All of these areas can benefit from the application of RFID to enable more event-driven and proactive processes. However, the benefit in each area varies depending on the airline or airport in question.

Baggage handling

IATA has published a global RFID standard (RP1740C) and recommended practice in the [Passenger Services Conference Resolution Manual](#) that promotes global interoperability, a business case for the industry and a [transition plan](#) for the technology. IATA members are invited to participate in the RFID oversight meetings and the Baggage Working Group. RFID oversight meetings are held [twice a year](#).

Catering

IATA has prepared a recommended practice, provided a [business case](#) and undertaken a trial of RFID technology with KLM City Hopper and KLM Catering Services. The results of the trial will update the recommended practice and business case. IATA members are invited to participate in the Inflight Taskforce.

Parts

IATA has published an [opportunity analysis](#) based upon the inclusion of RFID in ATA Spec 2000.

Aircraft turnaround

IATA has drafted a business case for the use of RFID and also sponsored a research project lead by Cambridge University. More information is available [here](#). The business case will be published in the fourth quarter of 2008.

Cargo

IATA has drafted a recommended practice for the use of passive RFID on cargo containers. This practice will be submitted for approval at the next Cargo Services Committee Meeting during the [World Cargo Symposium](#). IATA is currently overseeing the Air France / KLM air freight tests that will lead to a recommended practice for active or semi-active tags to be used.



IATA's position on RFID implementation

The key to successful RFID implementation is to start small and focus on areas where benefit can be delivered. RFID pilot programmes are an excellent mechanism for tackling specific problems where a business goal is clearly defined. For example, RFID can be used in baggage handling to reduce no-read rates and to monitor transfer of responsibility at originating and departing airports. Such implementations yield solid ROI and provide a glimpse of greater returns when other applications are enabled.

However, there are cases where RFID would not make sense. For example, a baggage mishandling rate of less than 1 per 1,000 passengers does not require RFID as there is no problem to solve. Other situations where RFID would not be the solution are cases where a highly-developed infrastructure already exists – one, for example, that incorporates the use of a DCV (Destination Coded Vehicle). RFID also would not be optimal in a situation where manual systems are in place that are cost-effective and high performing.

Because the value of RFID is subject to the individual merits of each business case, there is no mandate for the universal adoption of RFID for baggage handling from IATA.

Isn't universal adoption needed for baggage transfer processes and cargo?

The use of RFID in transfer processes was carefully analysed by IATA as part of the [RFID transition plan](#). This analysis showed that only 80 airports needed to adopt RFID to deliver an annual benefit of over US \$200 million to the industry.

In the area of cargo, Air France demonstrated that a global network of RFID readers is not needed. With the introduction of RFID readers at two locations in CDG, Air France was able to capture critical service level information on their operation and to react quickly to exceptions in their cargo processes.

Does no mandate equal a rejection of the technology?

Absolutely not. RFID technology has a role to play in aviation and will bring benefits to airlines and airports. Each airline and airport should consider the use of the technology when examining challenges in their operation - in baggage, inflight, cargo, parts or any other process.

How can IATA help my airline / airport today?

IATA has conducted many trials and in the process has accumulated a great deal of information on the use of RFID. These materials are available on the [Simplifying the Business RFID homepage](#). Having completed this work, IATA has now launched the [Baggage Improvement Programme](#) - focusing on reducing the rate of baggage mishandling, which costs the industry some US\$3.8 billion annually. BIP will address all causes of mishandling - from IT and infrastructure to people and processes. RFID is part of the Baggage Improvement Programme toolkit. If you are an airline or an airport that wishes to participate in the IATA Baggage Improvement Programme then please contact the baggage go-team at bip@iata.org.

For questions or assistance on the implementation of RFID technology, please email rfid@iata.org.