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# AGM Resolution on RFID

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## Why RFID and Modern Messaging



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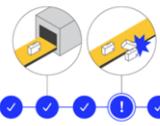
- There are a lot of pressures in the area of baggage processing and handling today.
- First, passenger demand for baggage tracking is at 84%. Already 78% of airlines have either implemented, are implementing or have plans to implement baggage tracking – in line with IATA Resolution 753 which is about having a common tracking capability so that the passenger can be served in the event of mishandling, even when they have made an interline journey. Now passengers expect that information to be shared with them, and that introduces some new challenges. These is a need for confidence, consistency and quality in the data to be shared with passengers, because sending the wrong information is unacceptable. RFID delivers passenger data needs.
- Secondly, then there is a serious issue that the industry is already facing. Passenger volumes are growing, and expected to double in the next 20 years. This growth will include baggage, and baggage systems are already operating at peak busy hour rate in many airports. Most sortation systems actually hit their maximum throughput at about 60% of their designed capacity, which is good news as it means systems can be improved before needing to expand or replace them. RFID is one answer to this, and so IATA recommends that when a baggage sortation system is near its capacity limits then RFID is introduced. Until then, barcode will support sortation well,

however RFID can bring improvements of 10-20% in capacity.

- Thirdly, bags are moved according to messages that are sent from the airline DCS to the baggage systems. These messages are currently sent over teletype connections, or using message distribution systems. These messages are open to some interpretation, and sometimes don't arrive. In addition to the chance that the message is missing or wrong, the infrastructure for these messages has a very high cost, for both maintenance and use. The answer to this issue is to introduce a modern messaging mechanism based on the IATA Airline Industry Data Model (AIDM). This introduces a self-verifying message structure that removes interpretation. The way these messages are delivered is also improved, using a robust internet mechanism that ensures message delivery.

# Key Benefits of RFID

**Improved end-to-end tracking**  
25% fewer misrouted bags per year



**Ease of adoption of Resolution 753**  
\$25k saved per million bags in operational efficiencies



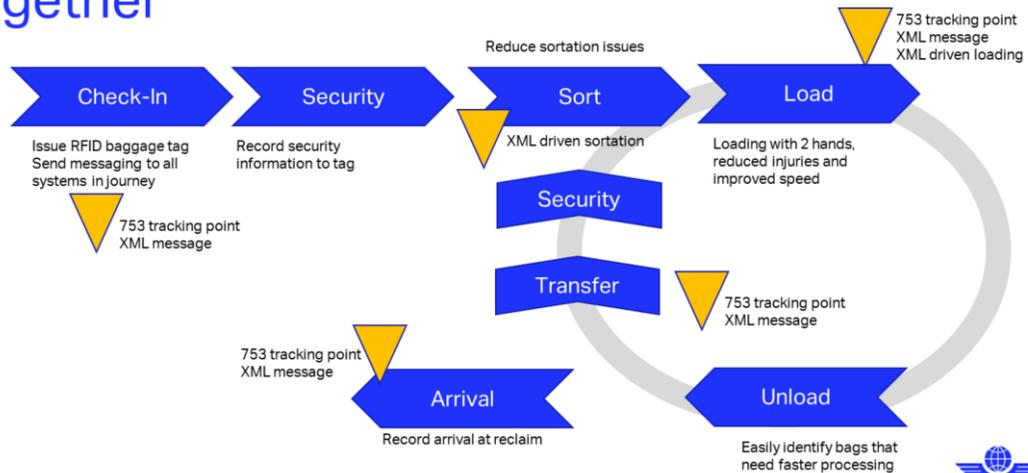
**Improved aircraft loading/off loading**  
\$14k saved per million bags in operational efficiencies



**Improved data consistency**  
>99% read rate  
Compatible, vendor-neutral and widely compatible



## 753 (tracking), RFID and XML working together



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- There are three elements that are being brought together for future baggage performance. These are the introduction of tracking through Resolution 753, improved data collection through RFID and improved data quality through the use of modern messaging.
- At check-in RFID baggage tags can be issued. As traditional baggage tags are hard to recycle and could wrap the planet over 60 times, there is a desire to move to reusable baggage tags. Adopting RFID is a major step in this transition, as once the industry is able to use RFID as ubiquitously as barcode is used today then we will be able to start looking at reusable tags. Until then, traditional tags incorporating RFID inlays are available.
- At security, baggage is screen to ensure that it is safe for carriage. One of the big issues in baggage is that once past security baggage can be “lost” in the system. This means that the bag needs to be rescreened, causing a dramatic increase in the chance of mishandling the bag. Recording the screening result directly to the bag allows for the status of the bag to be known saving the need for rescreening on the event that the system loses track for the bag.
- During sortation RFID will give a capacity increase because the bags need less

manual intervention. XML provides the message that tells the system which flight the bag is for, and where to send that bag.

- At loading, XML again provides a message to confirm that the bag is on the right flight, whilst RFID allows the handler to load the bag with both hands. This is a major improvement for the handlers, as carrying a scanning gun whilst loading the bags can cause delays and injuries from twisting whilst lifting the bag.
- The benefits at loading are matched when the aircraft is unloaded. The added advantage at unload is that bags that have shorter connection times can be identified and processed separately, allowing time to be made up and connections that could have been missed completed.
- When the bag is placed into transfer then XML provides a message again, this time as a process message for Resolution 753. 43% of all bags mishandled are transfer bags, and so knowing which transfer bags are where is a key element to reducing mishandling.
- Finally, at arrivals, the RFID inlay provides an easy way to collect the information that the bag has arrived. This is a crucial step in the baggage process. It is one where the passengers hate to wait for their bags, so monitoring delivery times is crucial to customer service, as well as one where airlines are sometime subject to fraud, with claims made for bags that have actually been delivered.

## Transitioning the Industry

IATA is working with airlines and airports to have 80% of passenger journeys RFID enabled by end 2022

Implementation guidance & fact sheet available and free on [www.iata.org/RFID](http://www.iata.org/RFID)

Workshops and webinars are being held globally



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- The transition to RFID is not an overnight activity. It will take time to introduce a common RFID capability across airports and airlines.
- IATA plans to work with airlines and airports to introduce RFID to 80% of passenger journeys over the next 3 years. This means implementation needs to be undertaken in at least 74 airports. IATA will support that with airport visits and reviews, and there is a wealth of material available on the IATA website that can be used to make progress today.
- In addition IATA is running workshops and webinars that give participants everything they need to understand RFID and modern messaging, the opportunities that they present for all stakeholders and how to take steps to make the baggage journey customer focused and seamless.

# Q & A

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