

# IATA Resolution 753: Airlines' Implementation Plan HUB & Network





## Introduction

Meeting customer expectations is the key to any business' success, and one of the first expectation of air passengers is that their baggage arrives with them at their destination. IATA Resolution 753 on baggage tracking made it mandatory for all airline members to track baggage at four mandatory points throughout the journey, yet the mishandled baggage rate has continued to increase, adversely affecting the brand reputation of the airlines and airports in question.

Therefore, IATA, its members, and associated governance groups (like Baggage Steering and Working Groups – BSG/BWG) established an implementation of Resolution 753 as one of their key priorities.

## Objective

To support Resolution 753 implementation by IATA's members, IATA has launched a campaign aiming to:

- 1. Collect information from airlines (and airports) regarding their status of Reso 753 adoption at the main HUB and network, and
- 2. Ensure IATA's members implemented Reso 753 or have a plan to do so within next three years.

Additionally, secondary objective of this activity is to collect more insight about baggage tracking issues, solutions, and to identify areas where airlines require support.

Lastly, this initiative also aims to obtain some complementary information about the associated baggage messing systems and standards.

#### **Definition of terms**

ATR	Automatic Tag Reader ATR is able to detect both Barcode label and RFID tag.
BHS	Baggage Handling System A BHS is a type of conveyor system installed at airports that transports checked baggage from the check-in desk to areas where bags can be loaded onto aircraft.
BRS	Baggage Reconciliation System Baggage reconciliation is a system to guarantee that all passenger bags are authorised to be loaded onto an aircraft, and no baggage travels unless the baggage-holder is on board unless other circumstances apply like RUSH or UNAR.
B2B	Business to Business
B2C	Business to Consumer
JSON	JavaScript Object Notation JSON is an open data interchange format that is readable by both people and machines. JSON is independent of any programming language and is a common API output in a wide variety of applications.
Main HUB	An airline's headquarters or home-based airport where majority of operations is performed
МВМ	Modern Baggage Messaging (as per RP 1755)
OCR	Optical character recognition or optical character reader (OCR) is the electronic or mechanical conversion of images or printed text into machine-encoded text,
RFID	Radio Frequency Identification (RFID) refers to a wireless system comprised of two components: tags and readers.



XML	Extensible Markup Language
	XML is a markup language that provides rules to define any data. It
	uses tags to differentiate between data attributes and the actual
	data.

## Background

Resolution 753 can be found under Annex 1. Resolution 753 implementation guide can be found here.

Airline's obligations under Resolution 753 are:

- Demonstrate delivery of baggage when custody changes\*.
- Demonstrate acquisition of baggage when custody changes\*.
- Provide an inventory of bags upon departure of a flight.
- Be capable of exchanging the above information with other members or their agents as needed.

\* Change in custody: the transference of possession, control and/or security if checked baggage from a member or its agent to another member or its agent.

These obligations translate to the minimum set of recorded tracking points that are as follows:

- Acquisition of the bag from the passenger by the operator or its agent at the airport or off airport locations 
   Acceptance
- Delivery of the bag on to the aircraft → Load
- Delivery and acquisition of the bag between operators and their agents when custody changes between operators → Transfer
- Delivery of the bag to the arrival facility  $\implies$  Arrival

The 4 mandatory tracking points are reflected in the baggage journey as showed below.



The four tracking points have been chosen because they form a minimum set of points that allow to record every bag as it enters and leaves the airport. It needs to be stressed that Resolution 753 is not intended to cover all baggage and operational tracking processes of the IATA members, but rather it is intended to encourage the operators to ensure a minimum set of baggage handling actions are tracked.





#### What is recorded at a tracking points?

#### Primary data elements

The ten-digit bag tag number is mandatory in all cases when recording tracking points. Time would also be recommended especially in case of offline scanning.

#### Secondary data elements

The following items should also be recorded where available.

- Passenger Name
  - PNR
- Outbound flight number and date
- Inbound flight number and date
- Onward flight number and date
- Security/Sequence Number
- Tracking action/event
- Time and date of recording
- Station of recording
- Recording Location/device (physical location)
- Container ID (ULD, Trolley or Cart)

If the recommended data elements are available by association, it does not need to be repeated; for example, recording the ten-digit bag tag and the flight number/date would enable the passenger name and PNR to be obtained from a reservations system.

It is very important for all operators to design an implementation plan that comprises of the baggage tracking specifications addressing their main HUB and network operations. The implementation plan is a document that helps operators to determine the best strategy for their needs and serves as a baseline to track compliance with the Reso 753.

Also, an implementation plan provides operators with the option to further analyse data regarding baggage tracking, discuss with airports their tracking capabilities and maximize benefits associated with baggage tracking and customers' satisfaction.

## **Baggage Messaging**

Baggage management is rapidly evolving, with new processes being continuously introduced. The current legacy type B messaging standards, which have been in place since 1985, do not provide an easy way to support baggage system integration and innovation. Baggage message failure or rejection are one of the major causes of baggage mishandling. Therefore, the airlines' industry drives more and more initiatives related to an introduction of a modern baggage messaging (MBM) schema in the baggage operations.

MBM is a new messaging standard published through RP 1755 and constructs baggage messages using a business capability language like XML (Extensible Markup Language), JSON (JavaScript Object Notation) or other equivalent languages. MBM defines the mode of communication for exchanging messages in a more secured and standard way to keep up with the current and evolving IT systems.

A messaging system with well-defined and extensible standard is fundamental building block for disparate systems across the industry to work coherently, efficiently, and driving continuous enhancements.

The benefits related to adoption of MBM include but are not limited to reduced cost for messing, improved data content (e.g. sending baggage pictures), reduced complexity, improved security and resilience, enabling new product offering like Offers/Orders, and backward compatibility.



As the data regarding Reso 753 adoption across the airlines' operations will be collected through a questionnaire, some additional information was added regarding MBM to taste the airlines' appetite to move towards RP 1755 implementation.

For any questions or comments do not hesitate to contact the IATA team at <u>baggageservices@iata.org</u>

## Information related to the airlines' questionnaire.

IATA through its regional teams will contact IATA members and will request them to complete a fillable pdf questionnaire. The questionnaire is complex and will require some time to complete, therefore a pdf format was chosen to ensure airline's representative(s) can save their response and continue to work on its completion through a period of time.

It's important that the right baggage contact is identified within the airline's operations, more colleagues from same airlines can fill the information. To ensure transparency, the full questionnaire is recorded below that airlines can review the questions in advance.

Questions' type:

S – select from drop down menu

F – free text, fill in

N – numeric format

M - multiple options possible, chose all that apply

## Target

Baggage Steering Group (BSG) in collaboration with Baggage Working Group (BWG) guided by Travel Standards Board (TSB) under the governance of Passenger Standards Conference (PSC) defined the following targets for airlines:

• 1A. If an airline implemented Reso 753 (4 tracking points) at their home HUB, they shall report its status to IATA.

AND

• 1B. Complete Reso 753 implementation at 30% of their scheduled network where baggage tracking capability at 4 points exists.

OR

• 2A. Complete Reso 753 implementation at the airline's main HUB if baggage tracking capability at 4 points exists.

OR

• 2B. Develop and share a plan for Reso 753 implementation at the home/main HUB and their scheduled network.

Measure: 100 % of eligible IATA members to share information and have Reso 753 implementation plan by end of 2025 with minimum response rate of 40% by 2024.

# Disclaimer

This survey is managed by IATA.

We are committed to protecting your personal information and respecting your privacy. Personal information is defined as any details that will enable you to be identified. When designing and executing our survey, it is our policy to take all necessary steps to ensure that personal information you provide is processed fairly and lawfully.

Only authorized IATA staff has access to personal information and they are obliged to respect its confidentiality.

If we ask you for personal information that enables you to be identified - e.g. your name, e-mail address or telephone number, it's for the purpose of being able to perform further follow up in regards to this survey, to know who is the key focal point of contact (within each airline) responsible for baggage tracking, and to be able to contact you in regards to IATA baggage activities.

You are entitled to ask that part, or all, of the record of your involvement in the survey be deleted or destroyed.

If you have any questions about this survey please email IATA Baggage Services baggageservices@iata.org

We thank you for your participation and collaboration.

IATA Baggage Team



## Questionnaire

Please fill the form by Adobe Acrobat. Please note questions with \* are mandatory.

### Section 1: Airline Profile

1. Airline name\*: S

2. Name of person filling this implementation plan and who is also responsible for Resolution 753 implementation\*: F

3. Role in the company\*: F

4. Email address\*: F

5. Phone number: N

6. Please provide the main HUB of your airline using the IATA 3 letter airport code\*: F

7. Please indicate the total number of destinations in your schedule network for passenger flights\*: N

### Section 2: Airline main HUB

1. At your main HUB, have you already implemented Baggage Tracking (Resolution 753) at a minimum of the 4 mandatory tracking points? \* S

Note: If e) is selected, anticipate that IATA will contact you in the near future to support you for the creation of the implementation plan development



- 2. At your main HUB, are you doing baggage tracking beyond the 4 tracking points, if yes indicate how many tracking points. \* **S** 
  - i. Specify the additional/optional tracking points at your main HUB.
- 3. Out of the 4 mandatory tracking points which one(s) is/are lacking at your main HUB to be fully complaint with Reso 753? \* M (Please hold "CTRL" to select applicable choices, click text box after your selection)
- 4. Is there infrastructure availability (ATR, handheld and/or inline scanners to read through either Barcode or OCR, or RFID or Bluetooth...etc) at your main hub to perform baggage tracking at the 4 tracking points? \* S
- 5. If your answer for the infrastructure availability at your main HUB above (#4) is "YES", when are you planning to make use of it? \*S
- 6. At your main HUB airport, by when do you plan to have the capability to exchange baggage messages produced by the BHS, BRS or DCS with other baggage value chain partners like airports, ground handling agents and downline station? \* S

### Section 3: Airline Network

7. In your airline network, what is the compliance level to Resolution 753 implementation at the 4 mandatory tracking points (scanning at acceptance, transfer, loading & arrival)? \*S

i. Specify the percentage\*

- 8. If you have implemented baggage tracking (Reso 753) at 30% of your network and above, by when do you think you will achieve full network implementation. \* S
- 9. If you have not reached the 30% network baggage tracking as per Reso 753, do you have plans to accomplish it by 2025? \* S

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10. If your network compliance with Reso 753 is below 30%, what is your plan to increase compliance to achieve a minimum of the 30% implementation of baggage tracking by 2025? **F** 

- 11. Out of the 4 mandatory tracking points, where does your airline have issues with baggage tracking within your network? \*M (Please hold "CTRL" to select applicable choices, click text box after your selection)
- 12. What is the percentage of your network where you have infrastructure available (ATR, handheld and/or inline scanners to read through either Barcode or OCR, or RFID or Bluetooth...etc) to perform baggage tracking at the 4 tracking points? \* S

i. Specify the percentage \*

13. What is the percentage of your network where you have capability to exchange baggage messages produced by the BHS, BRS & DCS with other baggage value chain partners like airports, ground handling agents and downline station? \* S

i. Specify the percentage\*

14. When do you plan to achieve baggage message exchange capability throughout your network?\*S

# Section 4: Baggage scanning at the core tracking points across your operations

#### **Tracking Technology**

15. Mark the most preferred technology for your baggage tracking (multiple options possible) \* M (Please hold "CTRL" to select applicable choices, click text box after your selection)

#### Tracking at Acceptance

16. Describe the baggage tracking processes at acceptance (including the baggage acceptance at offairport locations, if applicable). \*F

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#### Tracking during Loading

17. Detail the practice used to reconcile the number of checked-in bags to be loaded to aircraft against the number of bags available under the aircraft.\* **F** 

18. Detail the process used for capturing the tracking information of baggage at loading. \* F

- Do you scan bags loaded into sealed containers?
   If so, describe where (e.g., build up area, aircraft side) \* F
- 20. Detail the process used to scan loose loaded bags and their transportation to the aircraft side (e.g., baggage trolleys/carts with no netting/cover etc.) \*F

#### Tracking at Transfer

21. Detail the process used for capturing the tracking information of baggage at transfer points. \* F

22. Describe how are the bags tracked/scanned for tail-to-tail (ramp to ramp) connection. \* F



23. Indicate what is the best location for custody change for the transfer of interline bags (e.g., bag exchange, aircraft unload, connecting drop location, BHS). \* F

#### **Tracking at Arrival**

24. Detail the process used for capturing the baggage tracking information at arrival up on delivery to the arrival facility. \* F

25. Describe the bags delivery recording for passengers receiving their bags at non-airport locations, if applicable. \* F

#### Section 5: General

26. What is your overall strategy to comply with Resolution 753 at your HUB/s, throughout a network or to reach as a minimum 30% of your network? (Not applicable if your airline is Reso 753 complaint)? \* F

27. How do you get and process baggage messages and information in your system? \* F

28. Do you currently have a process in place or have a plan for sending and receiving baggage messages with other interline carriers involved in the passenger journey? \* F



29. Do you have a strategy on how you will agree with each interline carrier to exchange baggage tracking data? \* F

30. How are you storing/saving the baggage tracking data for future reference in case of prorate or other audit related issues? \* F

31. Can you describe the requirements to store data in your airline? \* F

#### Section 6 Additional information related to Baggage Messaging

32. Are you facing challenges/limitations with Type B messaging in your baggage operations?

33. If the response to question 32 is yes, mark the Type B messaging issues:

34. If IATA would offer airlines a service to transition to MBM (including a transition and partner integration plan) would you be interested?



35. Would you be interested in a service that would seamlessly measure your Reso 753 compliance in real time with the ability to store your baggage tracking data?

36. Would you be interested in having a centralized global baggage platform with the capability to exchange messages B2B with your interline and airport partners and B2C with your passengers based on modern baggage messaging?

37. Do you currently have a short-term strategy to avail baggage tracking information to your customers by sharing their baggage status in real time? Detail the background.

38. Briefly explain the challenges you are currently face with baggage message exchange among your partners (airports, airlines, GHA etc).



### Annex 1: Resolution 753

**RESOLUTION 753** 

Baggage Tracking

PSC(38)753 Expiry: Indefinite Type: B

RESOLVED that,

The provisions of this resolution shall apply with effect from 1 June 2018.

IATA members shall maintain an accurate inventory of baggage by monitoring the acquisition and delivery of baggage.

"Baggage"/"Bag" means the property, as defined in applicable tariffs, of a passenger, carried in connection with the trip for which passenger has purchased a ticket and which has been checked in.

1. Purpose

Accurate baggage inventories will:

- Prevent and reduce mishandling by determining custody of every bag during different phases of baggage chain,
- Increase passenger satisfaction, as mishandling is reduced,
- Reduce the possibility of baggage fraud by closing the baggage journey,
- Enable exceptions to be detected where baggage is delivered to a party, but not processed further,
- Speed up reconciliation and flight readiness for departing flights,
- help measuring compliance to SLAs,
- Provide evidence to an automatic interline proration process.

#### 2. Member Obligations

Members shall be able to:

- (1)Demonstrate Delivery, of baggage when custody changes;
- (2) Demonstrate acquisition, of baggage when custody changes;
- (3) Provide an inventory of bags, upon departure of a flight.
- Be capable of exchanging the above information (1..3) with other airlines as needed.
- 3. Tracking Requirements
- The minimum set of recorded tracking points shall be:
- 3.1 Acquisition of the bag from the passenger by the member or its agent.
- 3.2 Delivery of the bag on to the aircraft.

3.3 Delivery and acquisition of the bag between members or their agents when custody changes between carriers.

3.4 Delivery of the bag to the passenger.

References

IATA Resolutions Manual: RP 1745a and RP 1745