

# Welcome

## Air Mail

For an efficient, safe, secure  
and seamless delivery

**Andre Majeres**

Head of e-Commerce & Cargo Operations

**IATA**



# Competition Law Guidelines

This meeting is being conducted in full compliance with antitrust and competition law.

## The following Agreements and Activities are Prohibited:

- Any collective agreement concerning prices or charges, allocating markets, territories, customers, suppliers, agents, etc.

## It is Prohibited to disclose the following information:

- Individual airline cost, rates, charges, surcharges or customer
- Individual airline intentions regarding increasing, reducing or reallocating aircraft capacity
- Sensitive commercial or proprietary information without consent

Delegates are cautioned that any discussion regarding topics outside the scope of the agenda, either on the floor or off, is strictly prohibited. The foregoing applies equally to email discussions, instant messaging and social media discussions

# IATA Introduction





**290+ airlines**

**83% of the world's air traffic**

**35% of the global trade by value**

Air Cargo: Supporting World Trade

**1%** by Volume

**35%** of total

World Trade

**\$5.9** trillion

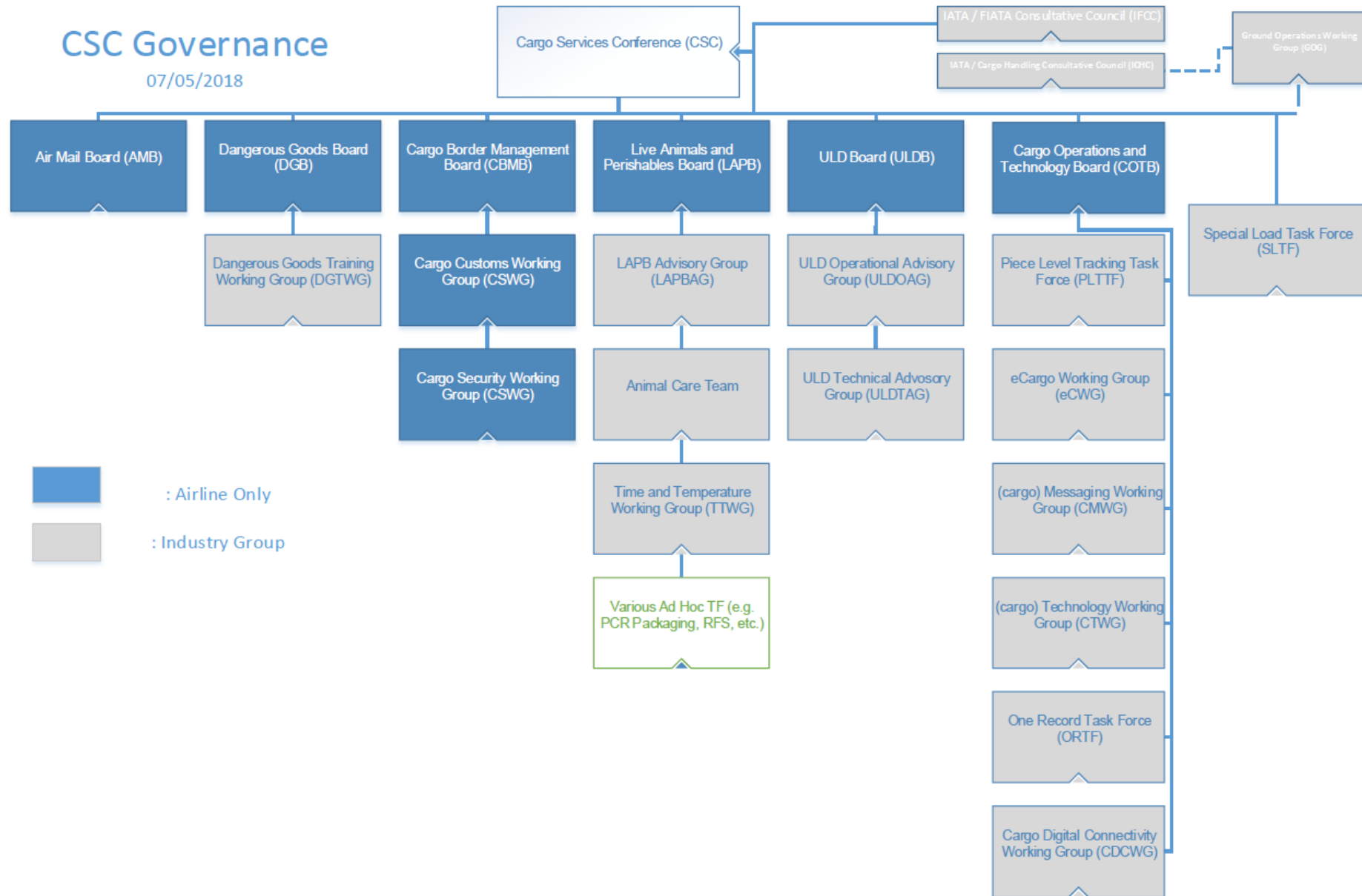
Value of cargo moved  
by air



# Serving the Industry



# We make standards with the Industry



# We collaborate with Industry Partners

## Our industry partners



NB: Please note this is not an exhaustive list of the organizations we collaborate with, nor of the specializations within IATA Cargo.



# Objective of the webinar: Create Awareness!

- I. **Safety is our number 1 priority**
- II. **Electronic Advanced Data (EAD) requirements**
- III. **The eCommerce challenge**





UNIVERSAL  
POSTAL  
UNION

# Joint IATA and UPU webinar introduction

13 April 2022



- Founded in Berne in 1874 ([192 member countries](#))
- United Nations specialized agency (since 1948)

## The Postal Network

- [320.4 billion](#) letter-post items
- 5.2 million employees, more than 690,000 post offices
- More than 80% of traffic comes from industrialized countries

## Activities

- [Regulating](#) worldwide traffic of international mail
- Establishing quality-of-service [standards](#)
- Establishing technical standards
- Maintaining a system for [compensating](#) countries known as terminal dues
- Promoting the [development](#) of modern products and services
- [Monitoring](#) market trends
- Promoting international [cooperation](#) and technical assistance
- Fostering a [dialogue](#) among all postal sector players





# Supply chain – key challenges

**Improve the interoperability of network infrastructure, by ensuring quality of service, efficient and secure supply chains, the development of standards and of information and communication technologies (ICTs), and streamlined operational processes and regulations”**

**Three pillars of the Supply chain:**

- **Security**
- **Customs**
- **Transport**





# Scale of the regulatory challenge



### Universal Postal Union

Data transfer to be mandatory. Changes to the remuneration structures.



**EU Regulation on cross-border parcel delivery services.** EU digital strategy.



**E-privacy.** Defining the need to “opt in” or “out” and its impact on DM.



**USO.** Redefining the regulation in EU and how to finance the USO



**GDPR.** EU General Data Protection Regulations legislation.



**Import Control System 2.** Pre-departure data requirements for aviation security.



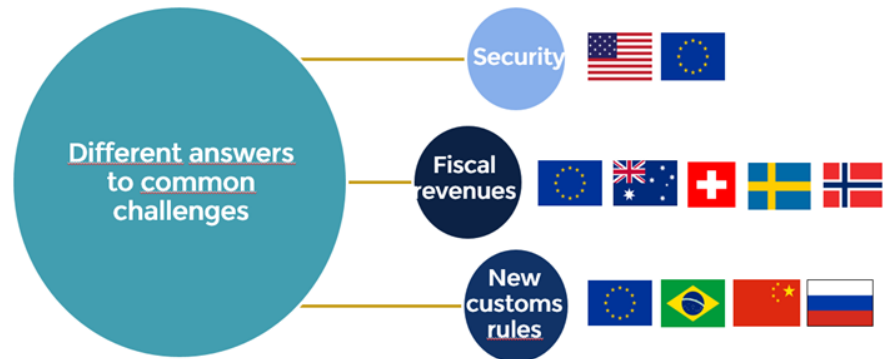
**Modernising VAT.** EU legislation shifting the tax liability to the sender.



**US Stop Act.** Data requirement on all goods required to enter the US.



### Multiplication of new regulations worldwide





**Different standards... though very similar...**

*EDI, handling, customs filing,  
security screening...*

**Necessity to align...**





# Lithium Batteries in the Post

Vincent J. Desiderio

Hazardous Materials Program Specialist

U.S. Postal Inspection Service- Security Group

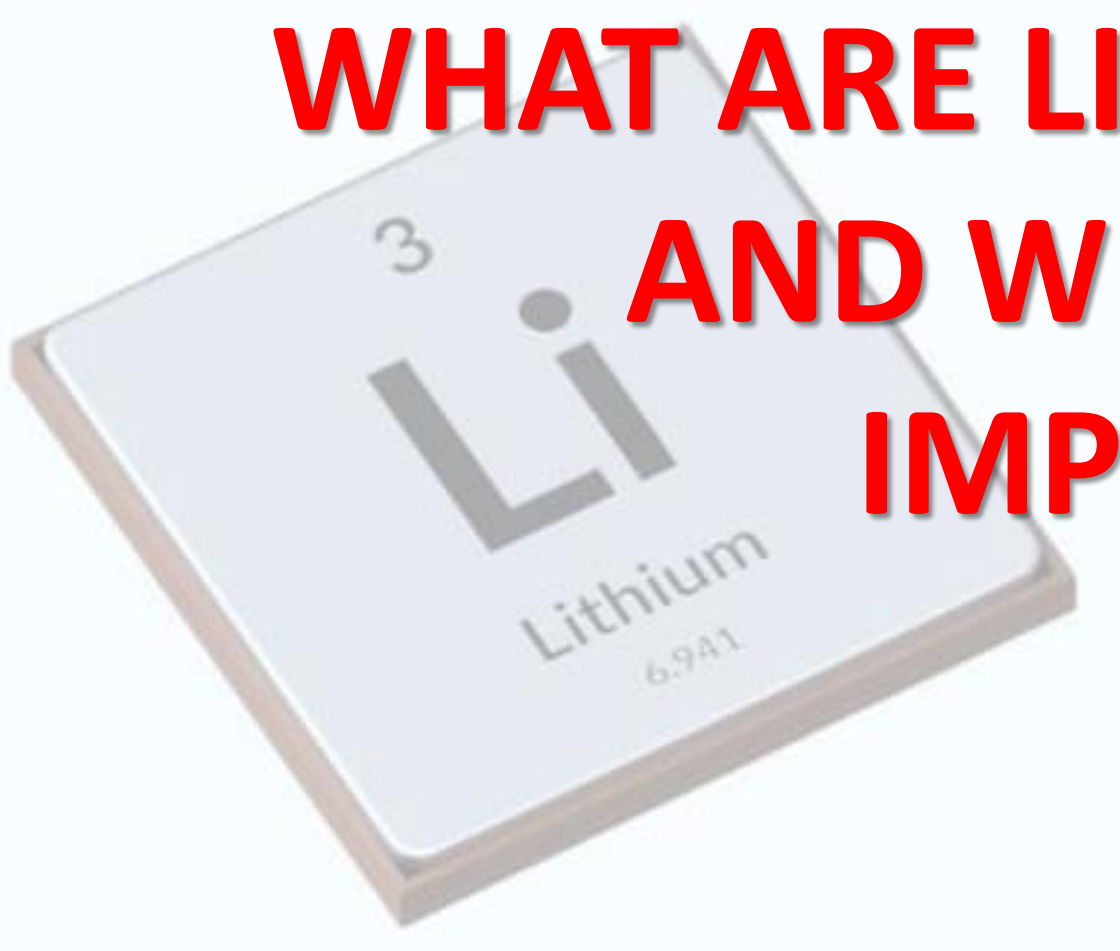
# USPIS HAZMAT PROGRAM

**“To protect the U.S. Postal Service and its employees, customers, business partners, and infrastructure from threats posed by undeclared and improperly prepared dangerous goods in the mail.”**





# WHAT ARE LITHIUM BATTERIES AND WHY ARE THEY IMPORTANT?



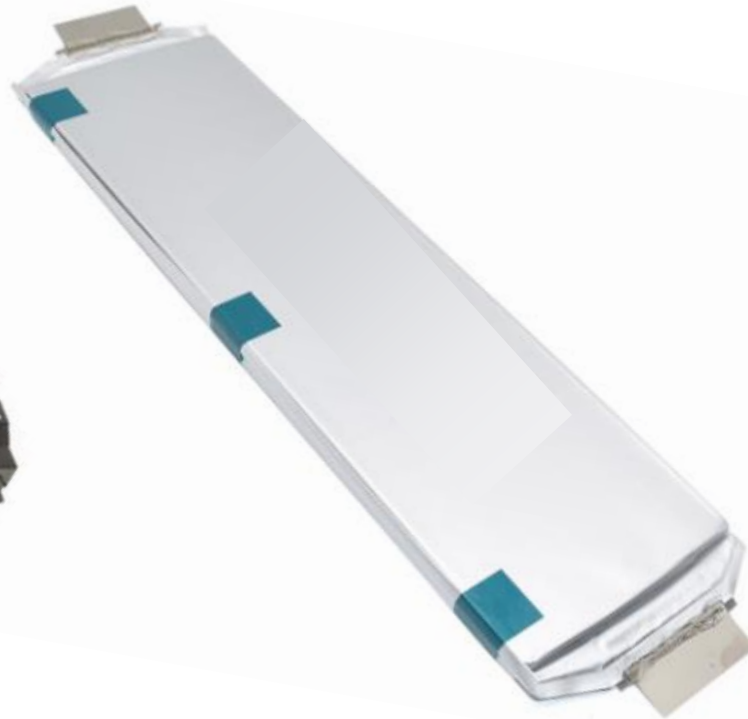
# Lithium Metal Batteries



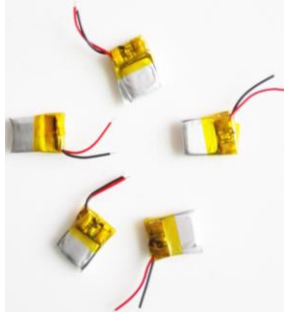
# Lithium-Ion Cells



# Lithium-Ion Batteries



# Lithium-Ion Batteries



0.1 Wh

5.76 Wh

36 Wh

49 Wh

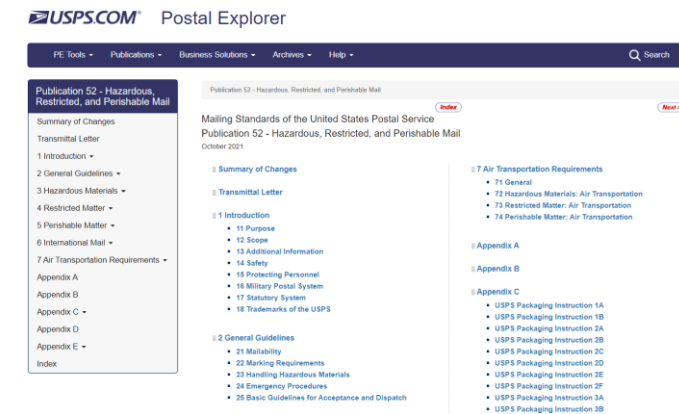
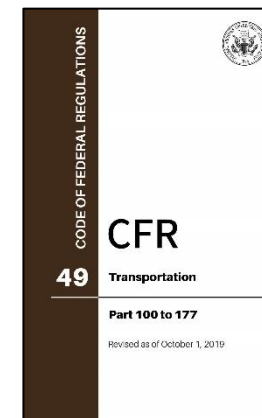
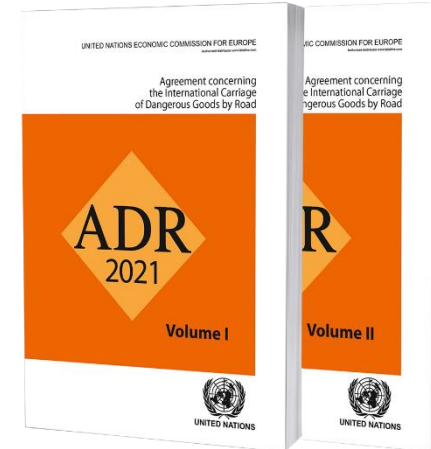
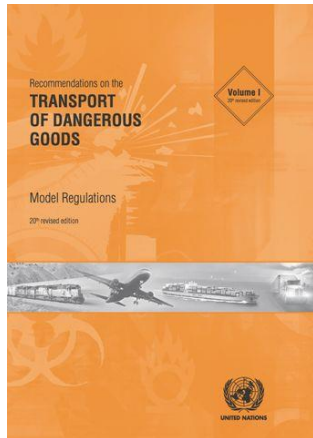
360 Wh

>5,000Wh



# HOW ARE LITHIUM BATTERIES REGULATED?

# DG Regulations





**UN3090**

For more information, call \_\_\_\_\_



**UN3480**

For more information, call \_\_\_\_\_



**UN3091**

For more information, call \_\_\_\_\_



**UN3481**

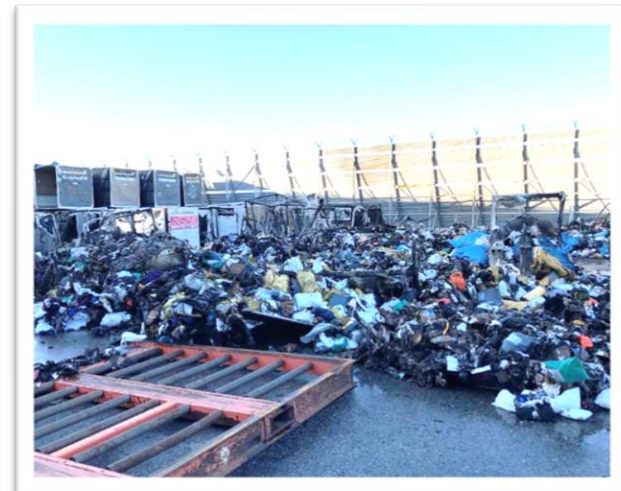
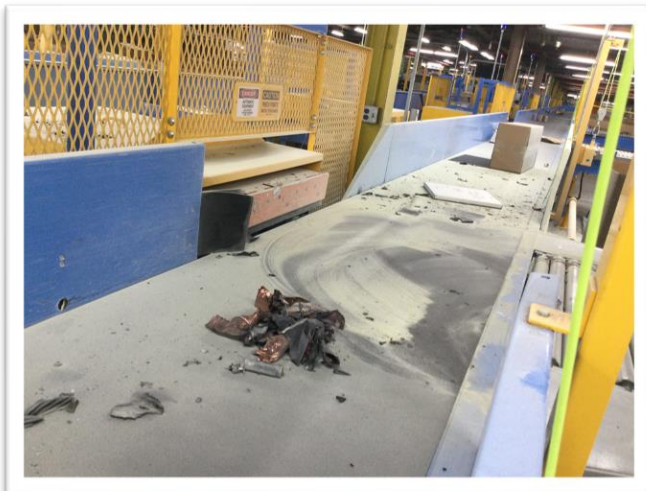
For more information, call \_\_\_\_\_



# Lithium Batteries in the Post

	Domestic (USPS)		International
	Surface	Air	
<b>UN3480</b>	20Wh per cell or 100Wh per Battery 5lbs per package	<b>PROHIBITED</b>	<b>PROHIBITED</b>
<b>UN3481</b>	20Wh per cell or 100Wh per Battery 8 Cells or 2 Batteries	20Wh per cell or 100Wh per Battery 8 Cells or 2 Batteries	20Wh per cell or 100Wh per Battery 4 Cells or 2 Batteries <i>(Contained In Equipment Only)</i>
<b>UN3090</b>	1g Per Cell or 2g Per Battery 5lbs per package	<b>PROHIBITED</b>	<b>PROHIBITED</b>
<b>UN3091</b>	1g Per Cell or 2g Per Battery 8 Cells or 2 Batteries	1g Per Cell or 2g Per Battery 8 Cells or 2 Batteries	1g Per Cell or 2g Per Battery 4 Cells or 2 Batteries <i>(Contained In Equipment Only)</i>

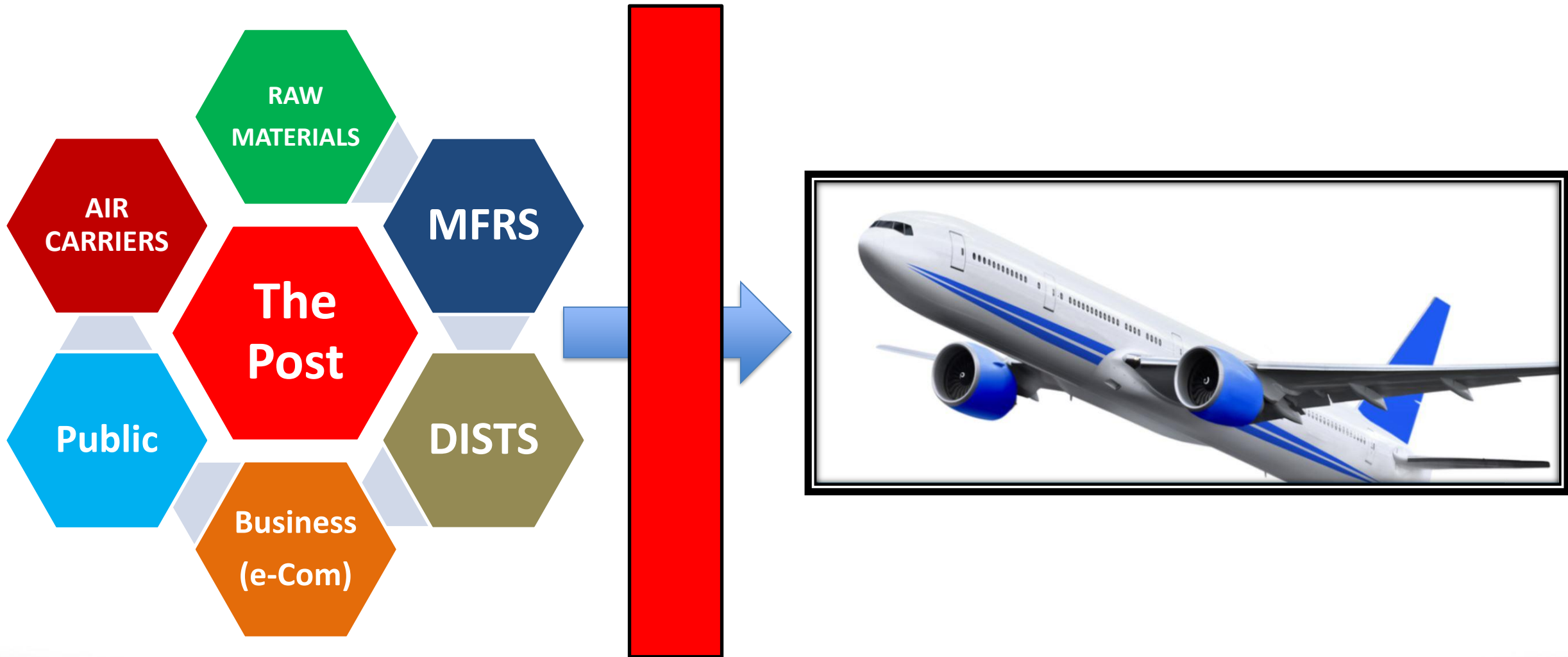
# WHY IS THIS IMPORTANT?



# June 4, 2019



# Shared Responsibility



# Risk Spectrum: Shipper Types

Low Volume

High Volume



**Isolated Incidents**  
**Possible Major**  
**Significance**  
**Unlikely to Recur**

**The Wild**  
**West**

**Frequent Incidents**  
**Typically Minor**  
**Severity**  
**Unlikely to Recur**

# The Nexus





# Resources and Initiatives

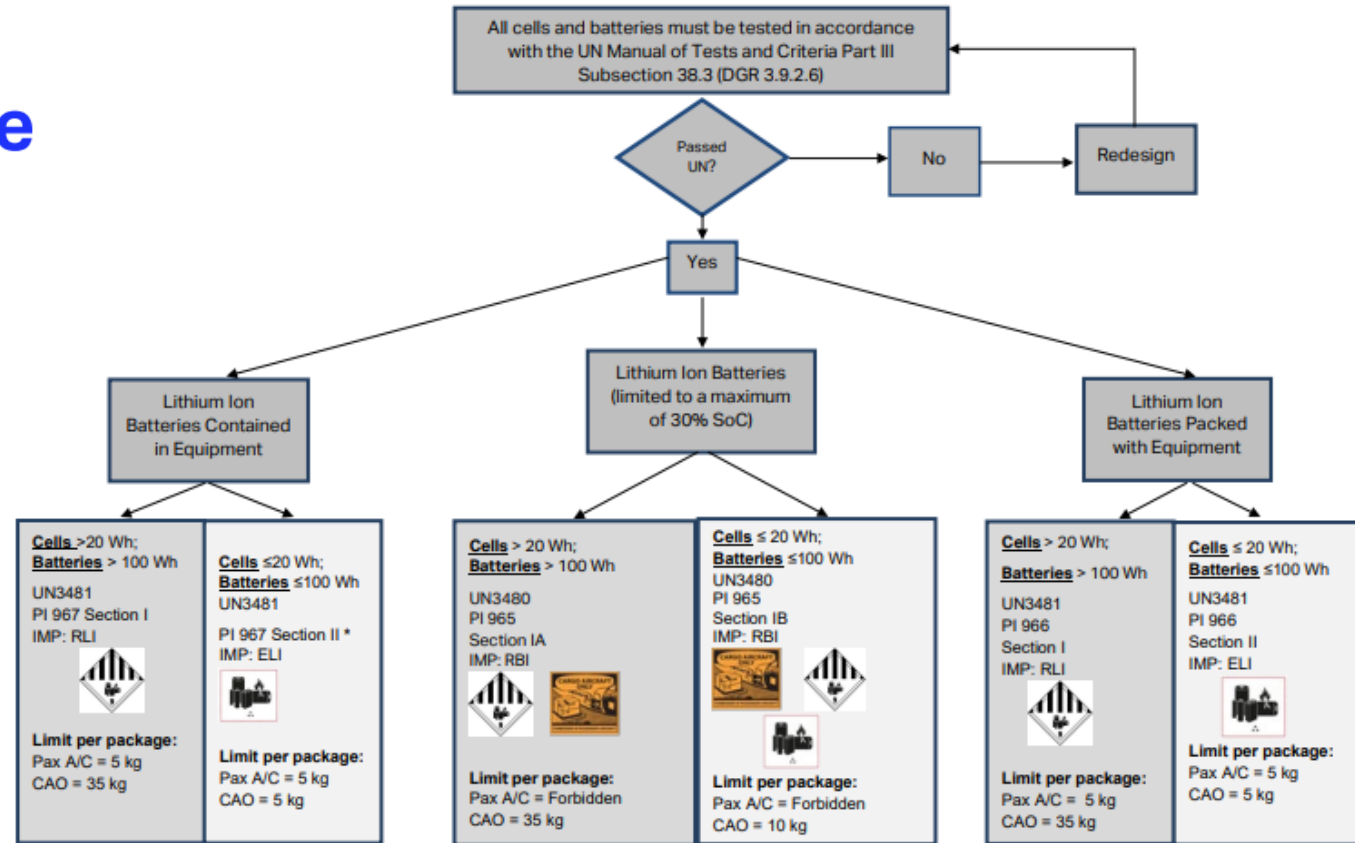




# 2022 Lithium Battery Guidance Document

## Transport of Lithium Metal and Lithium Ion Batteries

Classification Flowchart – Lithium Ion Batteries



\* exceptions exist to the marking requirements  
– see PI 967 Section II

<https://www.iata.org/en/programs/cargo/dgr/lithium-batteries/>

<https://www.iata.org/contentassets/05e6d8742b0047259bf3a700bc9d42b9/lithium-battery-guidance-document.pdf>



# UPU Joint Initiatives

- Dangerous Goods Training (ICAO-UPU)
- IATA-UPU Mail Safety Guidelines\*
- Dangerous Goods Search Tool (UPU)
- Equipment Containing Lithium Batteries (ECLB) Roadmap
- Lithium Battery Training (Multiple)

[\\*https://www.iata.org/contentassets/15ee3a255dc447b886d9a7e91fa65dbe/mail-safety-requirements.pdf](https://www.iata.org/contentassets/15ee3a255dc447b886d9a7e91fa65dbe/mail-safety-requirements.pdf)

# THANK YOU!



**VJDESIDERIO@USPIS.GOV**



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RECONNECTING THE WORLD



# CARGO COMPARTMENT SAFETY

IAN KNOWLES  
A/C/OPS



ICAO

RECONNECTING THE WORLD



# CARGO COMPARTMENT SAFETY OUTLINE

- ANNEX 6 - CONTEXT
- CHAPTER 15 – CARGO COMPARTMENT SAFETY
  - DOC 10102 - *GUIDANCE FOR SAFE OPERATIONS INVOLVING AEROPLANE CARGO COMPARTMENTS*
- COMPLEMENTARY STANDARDS





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## Annex 6 - Context

- Annex 6, Part I
- International Commercial Air Transport — Aeroplanes
  - *Scheduled international air services and non-scheduled international air transport operations for remuneration or hire*





## Chapter 15

- Cargo compartment safety
  - Adopted March 2020
  - Applicable November 2020

### CHAPTER 15. CARGO COMPARTMENT SAFETY

*Note — Guidance on the hazards associated with the transport of items in the cargo compartment, the conduct of a specific safety risk assessment in accordance with the Safety Management Manual (SMD) (Doc 9859), and the responsibilities for the transport of dangerous goods, is contained in the Guidance for Safe Operations Involving Cargo Compartments (Doc 10192).*

#### 15.1 TRANSPORT OF ITEMS IN THE CARGO COMPARTMENT

15.1.1 The State of the Operator shall ensure that the operator establishes policies and procedures for the transport of items in the cargo compartment, which include the conduct of a specific safety risk assessment. The risk assessment shall include at least the:

- hazards associated with the properties of the items to be transported;
- capabilities of the operator;
- operational considerations (e.g. area of operation, diversion time);
- capabilities of the aeroplane and its systems (e.g. cargo compartment fire suppression capabilities);
- containment characteristics of unit load devices;
- packing and packaging;
- safety of the supply chain for items to be transported; and
- quantity and distribution of dangerous goods items to be transported.

*Note — Additional operational requirements for the transport of dangerous goods are contained in Chapter 14.*

#### 15.2 FIRE PROTECTION

15.2.1 The elements of the cargo compartment(s) fire protection system, as approved by the State of Design or State of Registry, and a summary of the demonstrated cargo compartment fire protection certification standards, shall be provided in the aeroplane flight manual or other documentation supporting the operation of the aeroplane.

*Note — Guidance on the elements of cargo compartment fire protection and associated demonstrated standards are provided in the Guidance for Safe Operations Involving Cargo Compartments (Doc 10192).*



## Chapter 15

- 2 elements:
  - Operator risk assessment
  - Information from TC/STC holder

### CHAPTER 15. CARGO COMPARTMENT SAFETY

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## Operator risk assessment

- Originated from lithium battery work
  - Expanded to ALL items
    - Understanding that airworthiness issues not addressed
  - Includes cargo, baggage and mail



## Operator risk assessment

- Risk from transport of items:
  - Need to consider all hazards
    - Special focus on fire
  - Possibility to overwhelm aircraft fire suppression





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## Operator risk assessment

- Risk assessment basis
  - Operations, not individual flight
    - Passenger flight, cargo
  - Periodic review





## Operator risk assessment

- Risk assessment considerations
  - Elements described in Chapter 15
  - Not intended that operator ‘regulate’
  - Mitigations may be identified





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## Guidance material

- Risk assessment considerations
  - Describes Standards
  - Explains risk assessment process
  - Identifies mitigations





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## Guidance material

- Example - Supply chain:
  - Restrictions on types of cargo
  - Obligations/requirements on forwarders
  - Detection processes





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## Guidance material

- Example – Pax baggage:
  - Batteries, perfume etc.
  - Information to pax
    - Staff training, clear guidelines
  - Screening





## Information from TC/STC

- Information on fire protection system
  - Demonstrated certification standards
  - Aeroplane flight manual

### CHAPTER 15. CARGO COMPARTMENT SAFETY

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## Guidance material

- Chapter 6 guidance
  - Classification
  - Details equipment and procedures etc.

	Class A	Class B	Class C	Class D	Class E	Class F
<b>Fire detection</b>	Detection via crew/passenger	Automatic fire (smoke) detection	Automatic fire (smoke) detection	No (automatic) detection except if compartment is ventilated	Automatic fire (smoke) detection	Automatic fire (smoke) detection
<b>Principal crew action</b>	Hand-held fire extinguishing	Hand-held fire extinguishing	Activate fire suppression system	No action unless indication of fire is present	Depressurize and set to a prescribed flight level	Depends on design
<b>Aeroplane fire fighting means</b>	Active fire-fighting via hand-held extinguisher	Active fire-fighting via hand-held extinguisher	Built-in fire suppression system	Isolation	Flight level procedure, reducing oxygen partial pressure	Depends on design
<b>Fire fighting principle</b>	Extinguishing	Extinguishing	Fire suppression via extinguishing agent	Fire containment and oxygen consumption	Oxygen starvation	Depends on design
<b>Post-fire suppression conditions or actions</b>	Monitoring	Monitoring	Suppressed environment until end of flight (see paragraph 6.2.9)	(Small) increase of oxygen partial pressure during descent phase	(Large) increase of oxygen partial pressure during descent phase	Depends on design



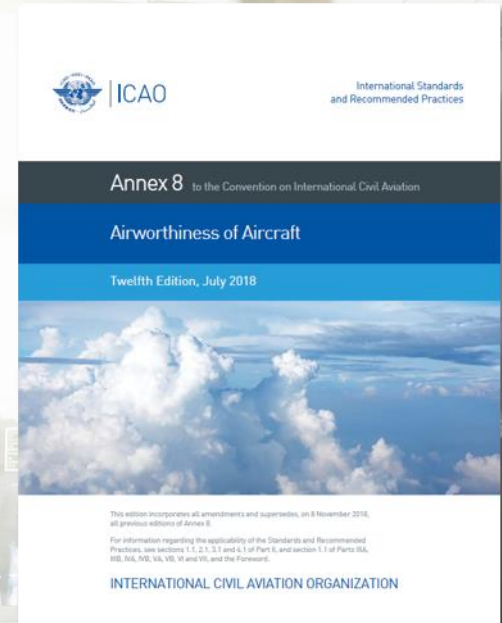
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## Complementary Standards

- Annex 8
  - Airworthiness
  - Amendment 109 (Nov 22)
  - Requirement to provide information





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# Thank You



# ICAO Annex 6, chapter 15

*Mandatory risk assessment on all items carried in an aircraft cargo hold*

Ed Boon | Operational Safety & Dangerous Goods Policies KLM Cargo

Arnoud Wink | Manager Border Control & Regulatory Affairs KLM Cargo





# Concerns over large PEDs as Checked Baggage

POSITION PAPER | 31 March 2017

*"The new ban on PEDs in the passenger cabin therefore has the potential to create safety risks that could prove to be more harmful than allowing passengers to carry them as hand baggage."*

Source:  
<https://www.eurocockpit.be/positions-publications/concerns-over-large-peds-checked-baggage>

**Safety & Security Concerns over large Personal Electronic Devices as Checked Baggage**

**NEW RISK CARGO COMPARTMENT SAFETY PROVISIONS PROPOSED FOR ANNEX 6,  
PART I**

---

*Insert following new chapter:*

---

**CHAPTER 15. CARGO COMPARTMENT SAFETY**

*Note.— Guidance on the hazards associated with the transport of items in the cargo compartment, the conduct of a specific safety risk assessment in accordance with the Safety Management Manual (SMM) (Doc 9859), and the responsibilities for the transport of dangerous goods, is contained in the Cargo Compartment Operational Safety Manual [working title] (Doc 10102).*

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- f) packing and packaging;
- g) safety of the supply chain for items to be transported; and
- h) quantity and distribution of dangerous goods items to be transported.

*Note.— Additional operational requirements for the transport of dangerous goods are contained in Chapter 14.*



This is:

- ✓ 1 Shipment on AWB (hybrid scenario)

In fact:

- ✓ Multiple shippers
- ✓ Consolidation without Houseway bills (HWB)
- ✓ No CN avail (that would also be NOT ALLOWED)
- ✓ Can be considered co-loading
- ✓ Becomes mail when arrived on dest.

# Mail and cargo cannot be interchanged

- Cargo on AWB is a consolidation of 'House' waybills
- The HWB is in this case (in fact) the receptacle
  - Mail is consolidation on receptacle level
    - Receptacle is a consolidation of postal items (of which in general 90% are individual identifiable packages)
  - Consolidatie (Master)
    - Consolidatie (house = receptacle)
      - pieces (missing)

The issue; we don't know what's in the pieces



# What keeps you awake at night?

Five compliance commitments:

- ✓ We know what we transport
- ✓ Catch discrepancies as early as possible
- ✓ No! ... means NO!
- ✓ Prepare for continuous change
- ✓ Integrate & innovate

# The duty to investigate

## Transit and the transport service providers – victims or facilitators?



Transport companies are the backbone of global supply chains, carrying our goods around the world. But should they be liable for compliance with export controls when often they are unaware of the true nature of the goods they are carrying, ask Gerard Kreijen and Martin Palmer with reference to recent Dutch enforcement actions.



## Warsaw Convention 1929 + Montreal Convention 1999

### Shipper Responsibilities

Art. 6: ..... to meet the formalities of customs, police and similar public authorities, shall deliver a document indicating the nature of the cargo.

Art. 10.1: The Shipper is responsible for the correctness of the particulars and statements relating to the cargo, .....

Art. 16.1: The shipper must furnish such information and such documents as are necessary to meet the formalities of customs, police and any other public authorities before the cargo can be delivered to the consignee.

### Airline Responsibilities

Art. 6. This provision creates for the carrier no duty, obligation or liability resulting therefrom

Art. 16.2 The carrier is under no obligation to enquire into the correctness or sufficiency of such information or documents.

### The duty to investigate

If one contrasts this risk with the developments in international trade – especially the limited transactional

*The extensive scope of the applicable regulation in combination with the wilfulness criterion applied by the Dutch court, effectively resulted in a kind of strict liability for TSPs failing to obtain the required licence.*





The European Union is implementing a new customs pre-arrival security and safety programme, underpinned by a large-scale advance cargo information system – **Import Control System 2 (ICS2)**.

### WHAT IS ICS2?

ICS2 is a new IT system created to collect data about all goods entering the EU prior to their arrival. Economic Operators (EOs) will have to declare safety and security data to ICS2, through the Entry Summary Declaration (ENS).

The system aims to better protect Europe's single market and its citizens with new customs safety and security measures and will facilitate free flow of trade through improved data-driven customs security processes, adapted to global business models.

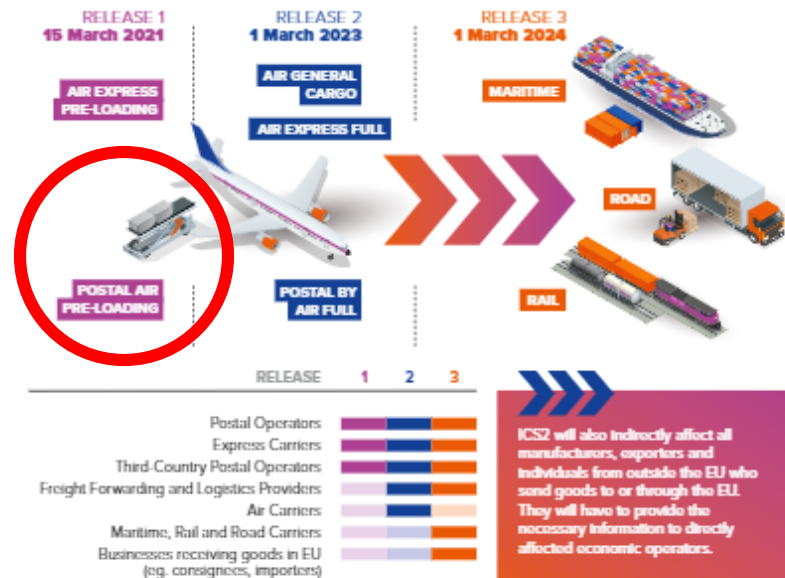
### WHAT ARE THE BENEFITS OF ICS2?

- Increasing the protection of EU citizens and the internal market against security and safety threats.
- Allowing EU Customs authorities to better identify high-risk consignments and intervene at the most appropriate point in supply chain.
- Supporting proportionate, targeted customs measures at the external borders in crisis response scenarios.
- Facilitating cross-border clearance for the legitimate trade.
- Simplifying the exchange of information between EOs and EU Customs Authorities.

### WHO IS DIRECTLY AFFECTED BY ICS2?

 <b>EXPRESS CARRIERS</b>	 <b>POSTAL OPERATORS INSIDE AND OUTSIDE THE EU</b>
 <b>FREIGHT FORWARDING AND LOGISTICS COMPANIES</b>	 <b>AIR CARGO CARRIERS</b>
 <b>FINAL CONSIGNEE ESTABLISHED IN THE EU (for goods received by sea)</b>	 <b>MARITIME, RAIL AND ROAD TRANSPORT CARRIERS</b>
	 <b>REPRESENTATIVES OF ALL AFFECTED EOs</b>

### WHEN WILL ICS2 BECOME EFFECTIVE?



ICS2 will also indirectly affect all manufacturers, exporters and individuals from outside the EU who send goods to or through the EU. They will have to provide the necessary information to directly affected economic operators.

### HOW TO GET READY:

- Get informed and gain understanding of the new requirements.
- Start preparing the update of your IT system and adapt your business processes.
- Take steps to ensure high-quality, precise data is provided.
- Provide training support to your staff.

### WHAT WILL HAPPEN IF EOs ARE NOT READY IN TIME?

- Consignments and freight will be stopped at the EU customs borders.
- The goods in question will not be cleared by the customs authorities.
- Inadequate declarations will either be rejected or subject to intervention, with possible sanctions imposed for non-compliance.

**STAY ON TRACK FOR ICS2**  
VISIT THE WEBSITE TO GET STARTED: [ec.europa.eu/ICS2](https://ec.europa.eu/ICS2)



# Major questions remain:

## Security

Receptacles need 100% 'Assessment complete' (on piece level) – How is this arranged? Do we (the airline) get the result also?

## Safety

How do we know what's in the mailbag?

How does the DPO assess risk on their customer?

## ULD (International Post Mail) Fire at ICN

- A fire broke out in the ULD waiting to be loaded on the aircraft in 01JAN2022.
- The ULD built up as only International mail from Korea.

### List of mail commodity from investigation

Calendar box set  
Snack, Sanitary ware, Noodle  
dried laver, Noodle, Clothes  
Fashion Hats  
Book  
Clothes  
Book  
Snack clothes  
Pants, Shirt, Clothes dress, Iron  
Laver, Snack, Sunscreen  
Instant foods, Household medicine, Cushions, Bath supplies, Instant foods  
**Toy**, Chocolate, Snack, Seaweed  
Vest  
Seaweed, Color cosmetics, Stomach medicine  
**Earphones**, Green tea, **For electric lighting** For anti-droplet, Earphones, Green tea,  
Jelly, Candy, Postcard  
cracker, cookie, biscuit, Candy  
bag  
Diary  
Shoes  
Albums



**NO Lithium  
Battery found  
at investigation  
for cause of fire  
(No evidence  
left due to burn  
out)**

A worker in a grey shirt and dark pants is operating a yellow scissor lift in a factory. The lift is extended upwards towards a white banner that reads "Think Safety First!" in red and blue letters. The banner also features several stars. The background shows the industrial structure of the factory with metal beams and a high ceiling.

# Risk = Chance x Effect

- What do we take on board?
- How do we know?
- How is this checked?
- How is it enforced?
- How is it communicated?
- How do we regulate it *together*?

Thank you . . .



# ***ELECTRONIC ADVANCE DATA (EAD)***

**Progress on process**

## **After handover to carrier**

*Update April 2022*

*IATA UPU Webinar April 13, 2022*

*Authors:*

*Wijnand Aalberts – PostNL*

*Bernard Heuzeveldt - KLM*





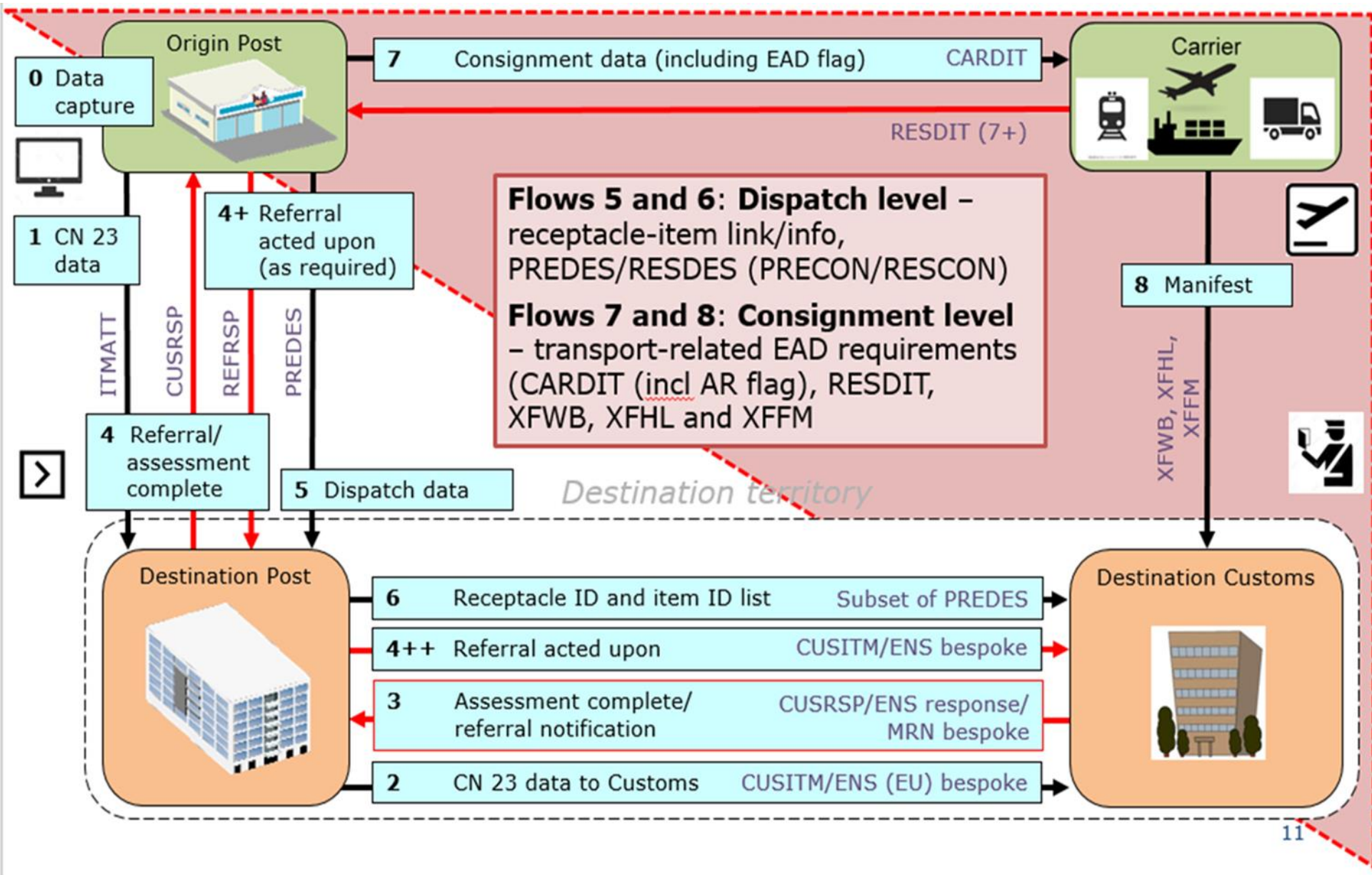
# Content of the presentation

- Background/introduction
- Basis: Global Postal Model
- Happy flow: item still in postal domain
- Referrals (general)
- Protocol in case of late referral (RFI/RFS/DNL)
- Additional information
- Way forward/call to action

# Background/introduction

- Several countries or regions are working on introduction of new regulatory electronic advance data (EAD) requirements
- The basics of the EAD-requirements are approved by the International Civil Aviation Organization (ICAO) and the World Customs Organization (WCO) via the Joint WCO–ICAO Guiding Principles for Pre-Loading Advance Cargo Information (PLACI))
- Examples of countries and regions that are working on EAD-requirements are
  - ❑ United States of America (Air Cargo Advance Screening – ACAS)
  - ❑ Canada (Pre-Loading Air Cargo Targeting – PACT)
  - ❑ European Union (Pre-Loading Advance Cargo Information – ICS2 PLACI)
  - ❑ United Kingdom (Pre-Departure Information for Cargo Targeting – PreDICT)
- New regulatory requirements for European Union will become in place 1 March 2023
- Expectation is that other countries will follow soon

# Basis: Global Postal Model

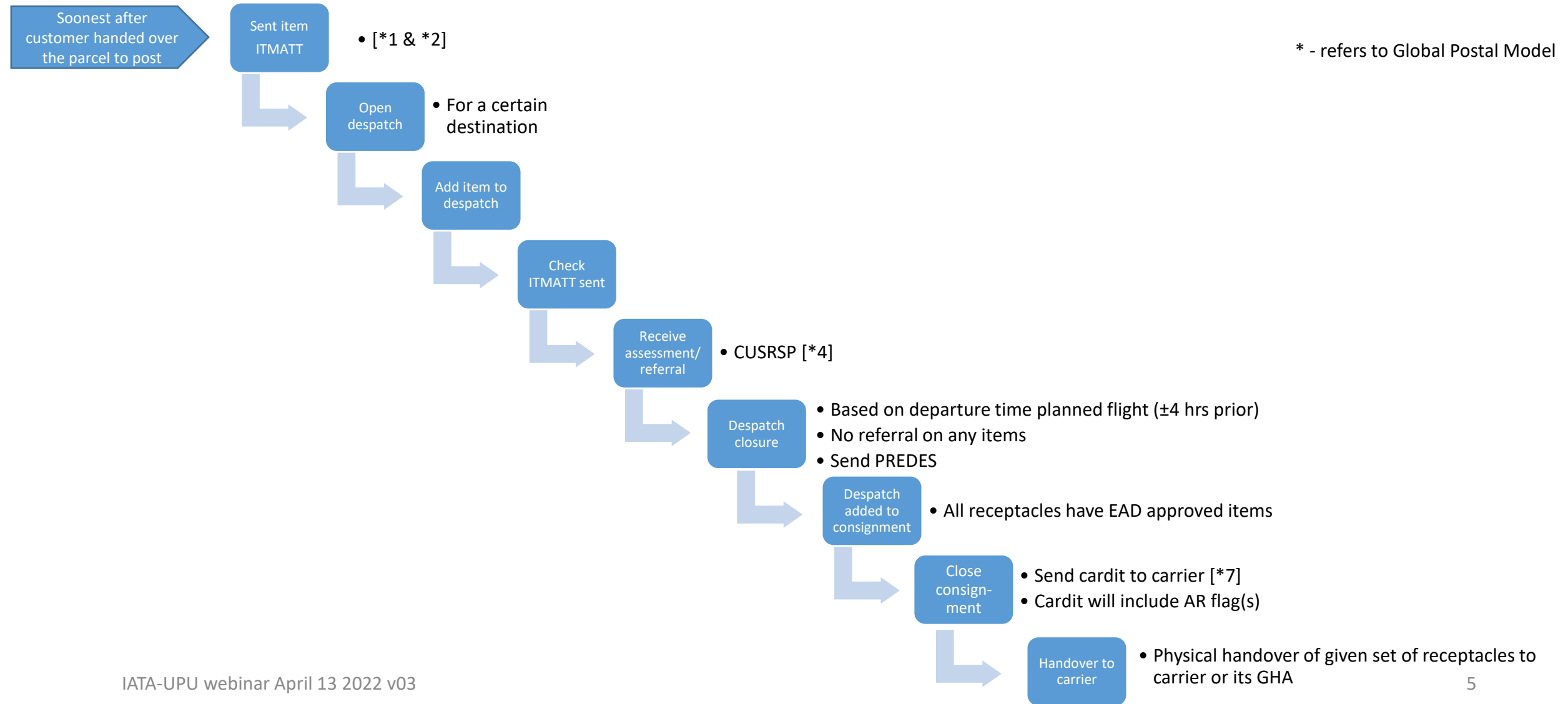


Between origin post, destination post and destination Authority information on item level is exchanged resulting in either an item allowed to be transported or not transported.

When it is not allowed to be transported the item will not be handed over to the carrier.

Note: GPM does not include transshipment /transfer/transit filing yet. This is under development

# Happy flow - ITMATT approved – Post domain



# Referrals

\* - refers to Global Postal Model

- For airmail the Post is responsible as EO (Economic Operator) to file EAD to authority. This is based on mail items. Carrier only files the ICS.
- Referral are responses from authority [\*4] that require (direct) attention
- Speedy back and forth communication channel between origin post, destination post and destination authority must exist to answer [\*4+, 4] to referrals.
  - No existing (UPU or IATA) messaging between DO and carrier for referrals
- Late referrals are referrals that are received by the origin DO after physical handover to carrier
- When late
  - For these cases there must be an agreed protocol between origin Post and carrier
  - Post and carrier processes must have an exception handling process in place

# Referral scenarios

Source: EU guidance on air cargo referral protocols

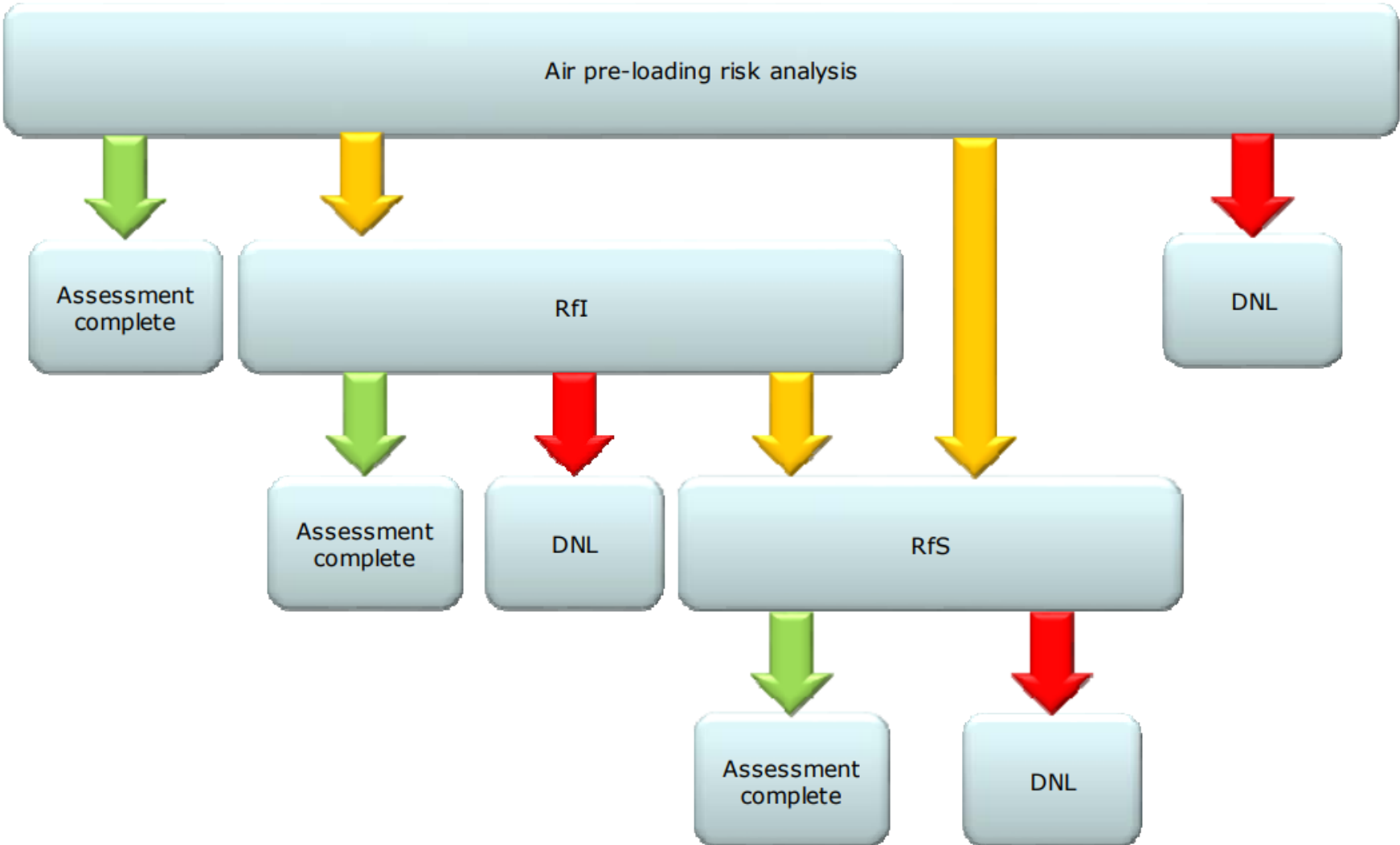
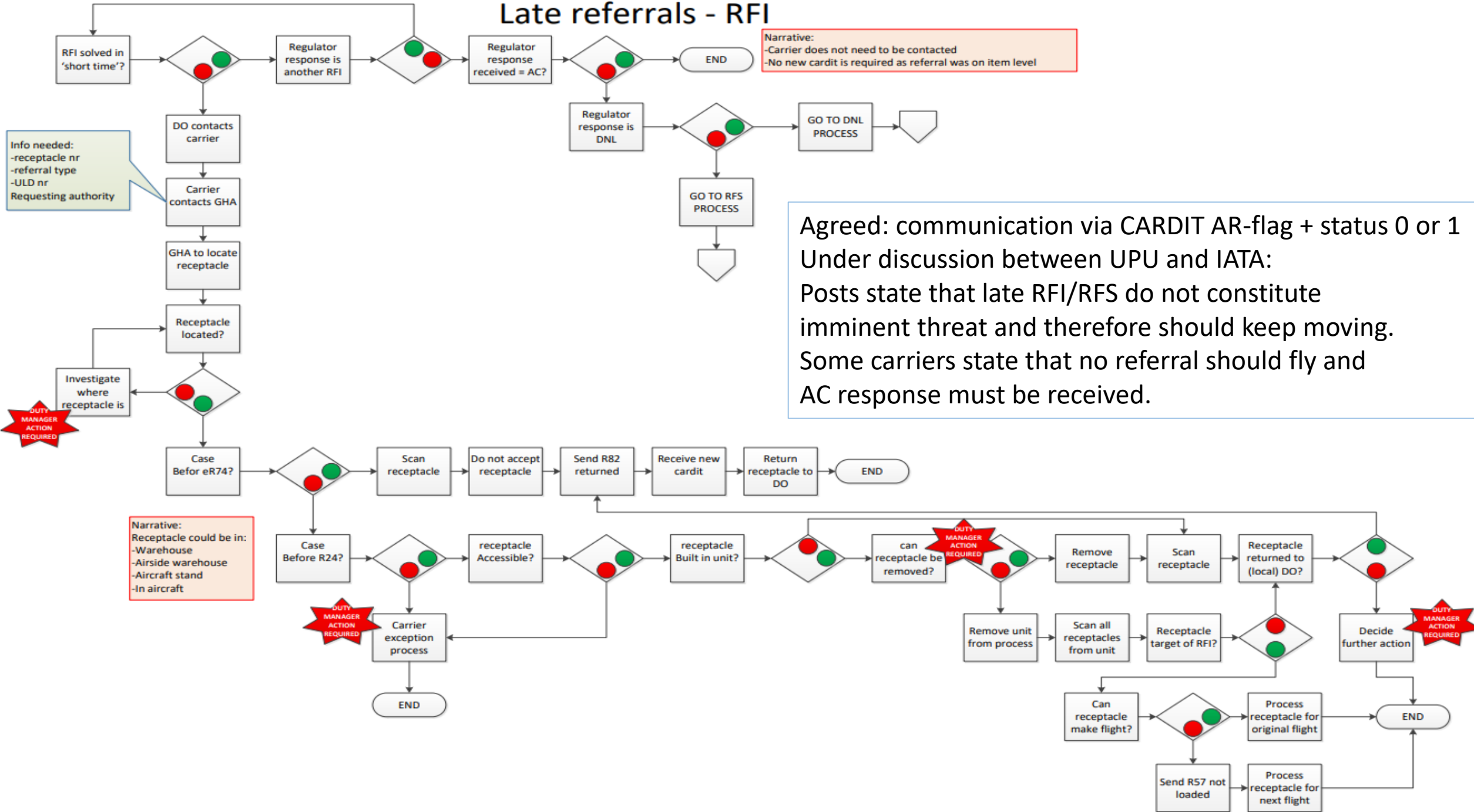


Figure 1: Overview of the referral scenarios

# Late referrals - RFI



**Narrative:**  
 -Carrier does not need to be contacted  
 -No new cardit is required as referral was on item level

**Info needed:**  
 -receptacle nr  
 -referral type  
 -ULD nr  
 Requesting authority

Agreed: communication via CARDIT AR-flag + status 0 or 1  
 Under discussion between UPU and IATA:  
 Posts state that late RFI/RFS do not constitute imminent threat and therefore should keep moving.  
 Some carriers state that no referral should fly and AC response must be received.

**Narrative:**  
 Receptacle could be in:  
 -Warehouse  
 -Airside warehouse  
 -Aircraft stand  
 -In aircraft

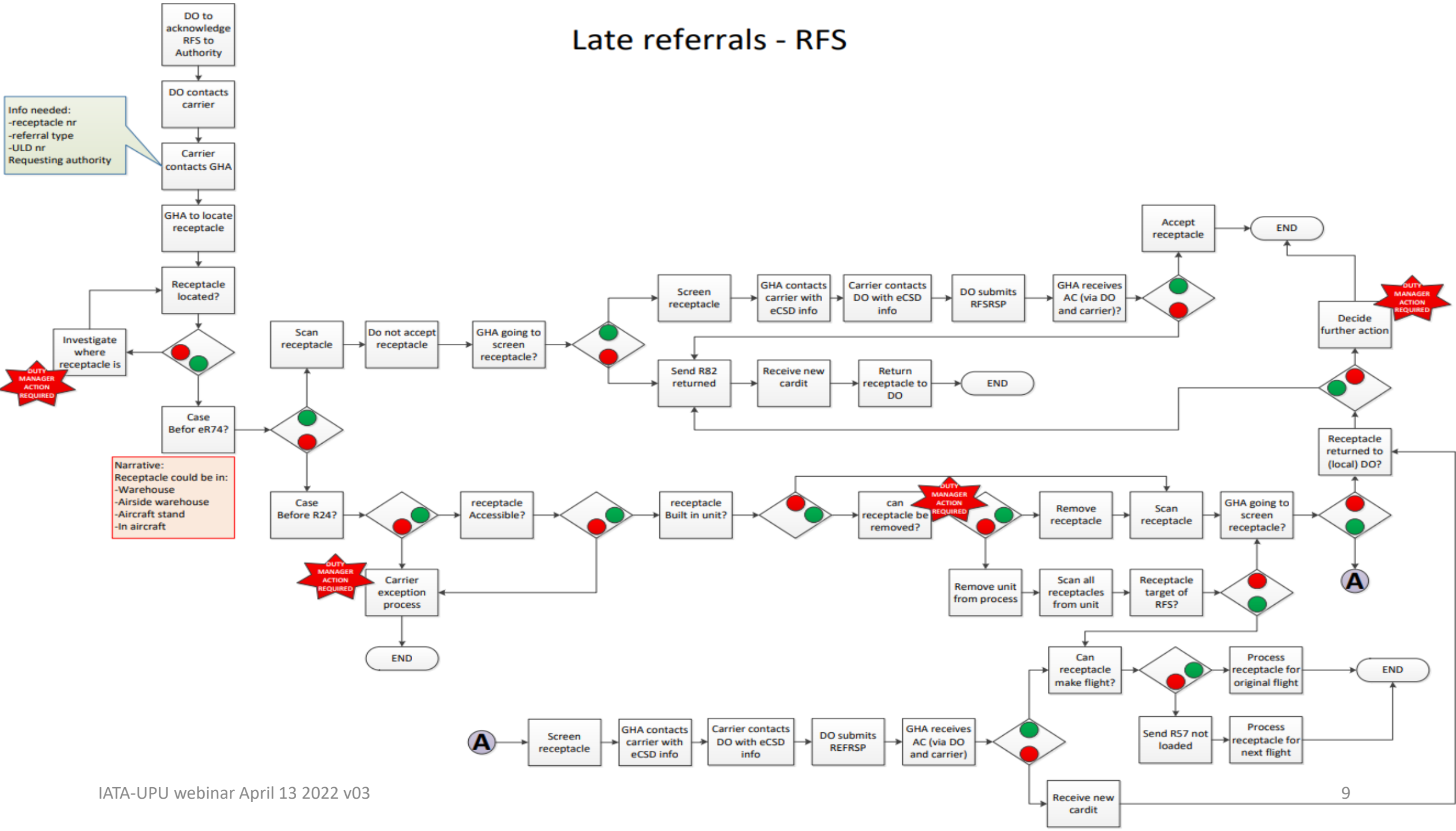


# Late referrals - RFS

Info needed:  
-receptacle nr  
-referral type  
-ULD nr  
Requesting authority

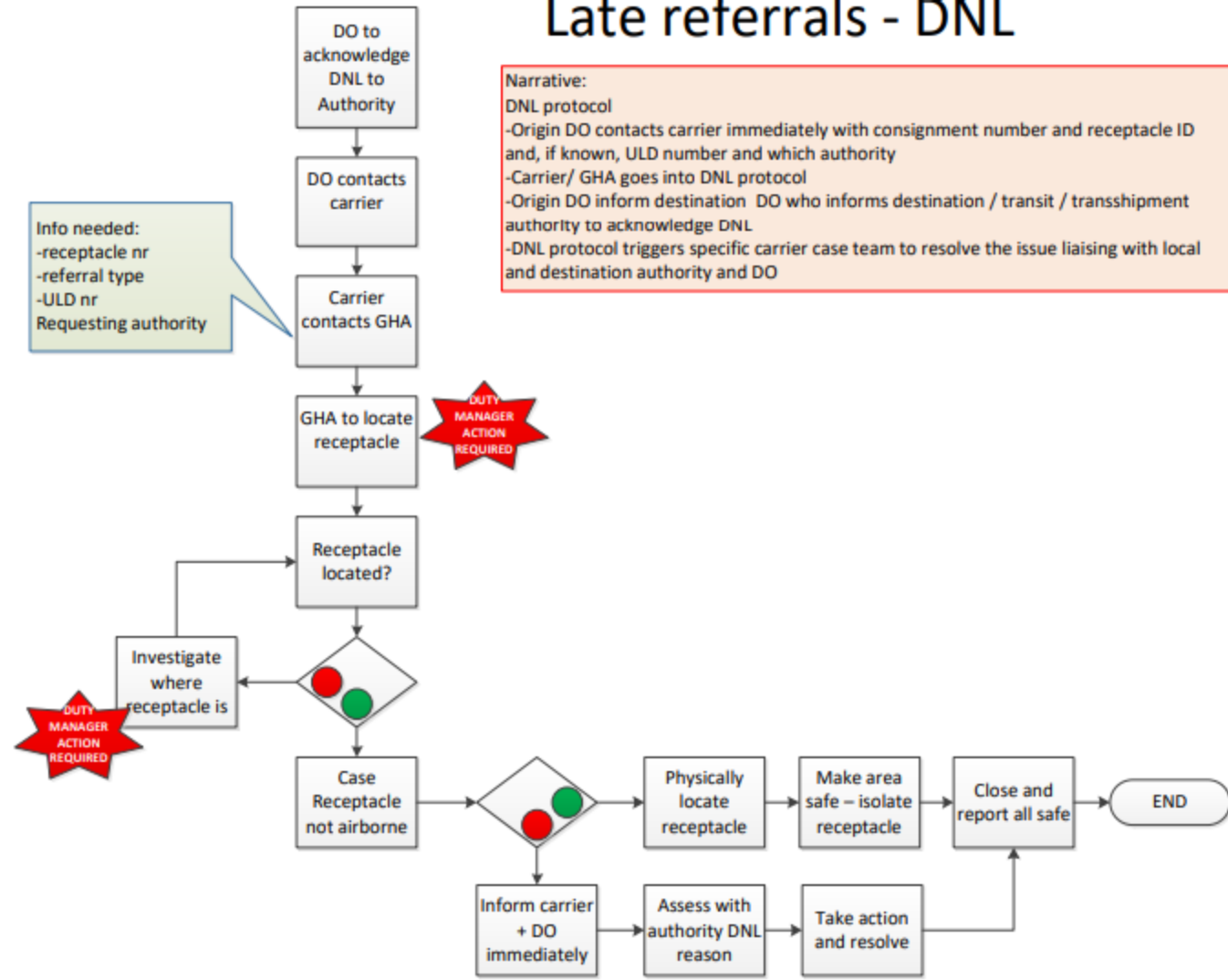
DUTY MANAGER ACTION REQUIRED

Narrative:  
Receptacle could be in:  
-Warehouse  
-Airside warehouse  
-Aircraft stand  
-In aircraft





# Late referrals - DNL



# Additional information

- The IATA–UPU expert team on EAD will supplement the protocols with a clear statement on the existing regulations, responsibilities and technical requirements for compliance.
- Also the following relevant information will be included in the documentation regarding the protocols:
  - excerpt of the relevant WCO–ICAO principles;
  - terminology and definitions of terms;
  - Global Postal Model (GPM);
  - Framework of a DNL protocol.

# Way forward

- The presented procedures can be used as the draft framework to be tailored and fine-tuned locally between airlines, handlers and posts, based on the specific local situation of Posts and airlines
- Some aspects are still under discussion. The EAD-expert team is aiming to have these aspects clarified around summertime, but this is also depending on input from discussions between UPU and European Union
- Any update will be communicated via the regular communication channels of UPU and IATA
- But posts and carriers need to start as soon as possible to prepare and plan to start the work on developing a localized version of the general protocol based on the local situation and the currently available information
- This “call to action” will be included in the final version of the protocols
- Last but not least: the localized protocols need to be authorized by the relevant local security authority as this triangular protocol (post-airline-security authority) is key to achieving compliancy with the security levels required by the EAD-enforcing countries

*Thank you for your attention*



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# Electronic Advanced Data (EAD)

## IATA-UPU Webinar (13 April 2022)

Luc Larrieu-Sans, Leg-2.com

Stéphane Herrmann, UPU



EAD Check API

AR Flag in CARDIT

CARDIT/RESKIT to  
XML Cargo converter



EAD Check allows **designated operators and carriers** to check that the mail they are sending, receiving or processing in open transit, closed transit or transshipment complies with the EAD requirements.

The UPU's Postal Technology Center has developed API methods in QCS Big Data to allow retrieving the EAD status for individual mail items, and for all mail items within a receptacle.

The API methods can be called by any IT system used by designated operators and carriers.

**November 2021**

**Available for IPS users  
(112)**

Upgrade to the latest  
version planned/to be  
planned by each post

**November 2021**

**API available for all  
posts and carriers**

**April 2022**

**Upgrade of IPS.post  
planned  
(81 users)**



The **API request** sent to CDS/QCS Big Data allows specifying either

- a S10 mail item identifier or
- a S9 receptacles identifier



The **API response** from CDS/QCS Big Data returns for each mail item in the request:

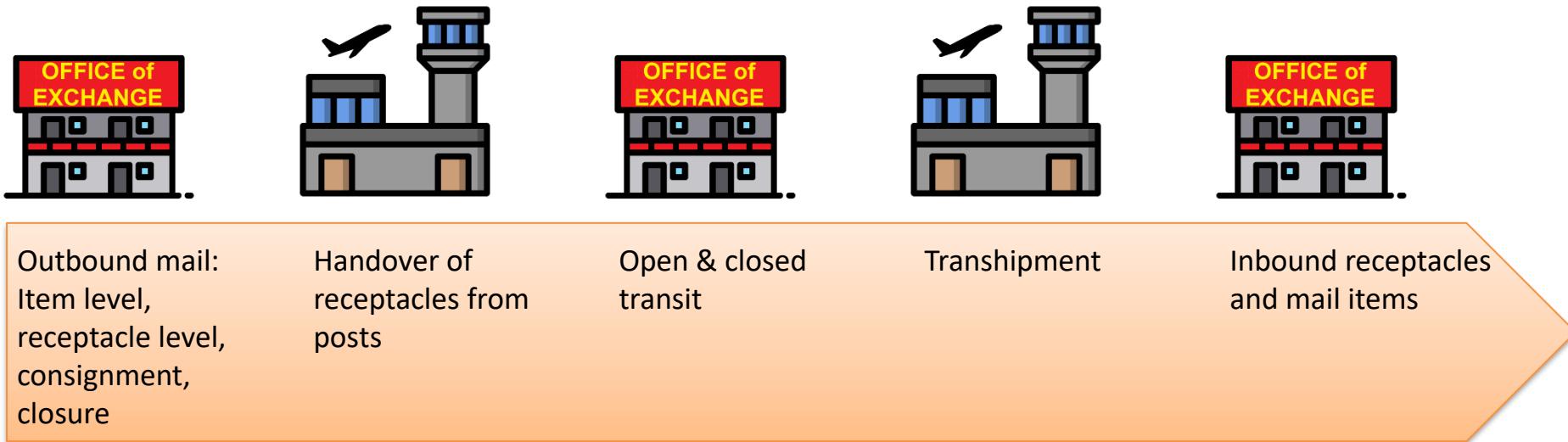
- Item identifier
- Whether or not an ITMATT was sent for the item
- List of referrals (ITMREF messages) of type RFI, RFS or DNL for the item.

For each referral:

- Referral type
- Whether it was responded or not (i.e. if a REFRSP message was sent, linked to the ITMREF)

Support of ASC to be  
implemented in 2022





- EAD Check provides the status of individual mail items
- The status is not included in any EDI messages



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# Agenda

EAD Check API

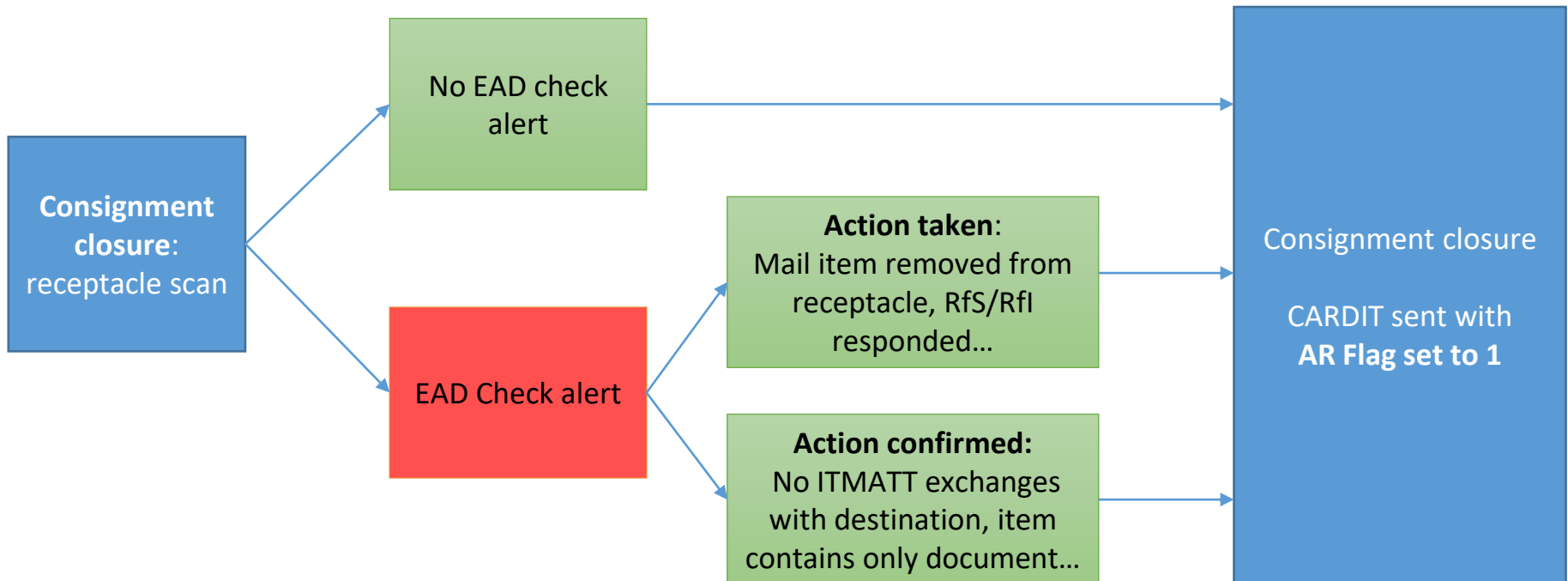
AR Flag in CARDIT

CARDIT/RESKIT to  
XML Cargo converter



EAD Check will help designated operators assess whether an action should be taken before closing the consignment

Implementation of AR Flag in IPS/IPS.post/IPS Cloud:





EAD Check API



AR Flag in CARDIT



CARDIT/RESKIT to  
XML Cargo converter

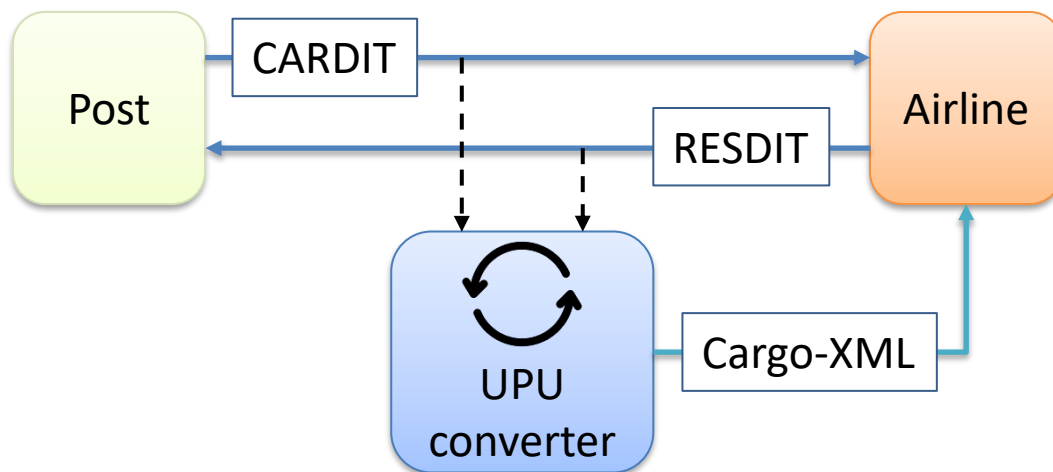


# CARDIT/RESBIT to Cargo-XML converter

UPU has developed a tool to convert **CARDIT-RESBIT** messages into **Cargo-XML** messages.

Airlines that do not have the ability to perform the conversion can request the UPU to perform the conversion and make the **Cargo-XML** messages available through APIs.

If airlines are interested in testing, please contact UPU.



## PAWB mandatory

Conversion based on CARDIT if PAWB included or based on RESBIT



Leg-2.com has helped some non EU postal operators to implement CARDIT / RESDIT exchanges with the Airmail Data application.

Several tests have been conducted in the first quarter of 2022.

Easy identification of the AR flag segment when it exists

Setting up an alert both for the airline and the postal operator if the AR flag segment is missing while the destination requests it.

CARDIT messages converted in CARGO-IMP messages if necessary.

Satisfactory usage of the UPU XML conversion tool





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# Thank you!

Luc Larrieu-Sans

Founder & CEO Leg-2.com

luc@leg-2.com

Stéphane Herrmann

Lead Technical Account Manager, UPU

stephane.herrmann@upu.int

# e-Commerce

**Andre Majeres**

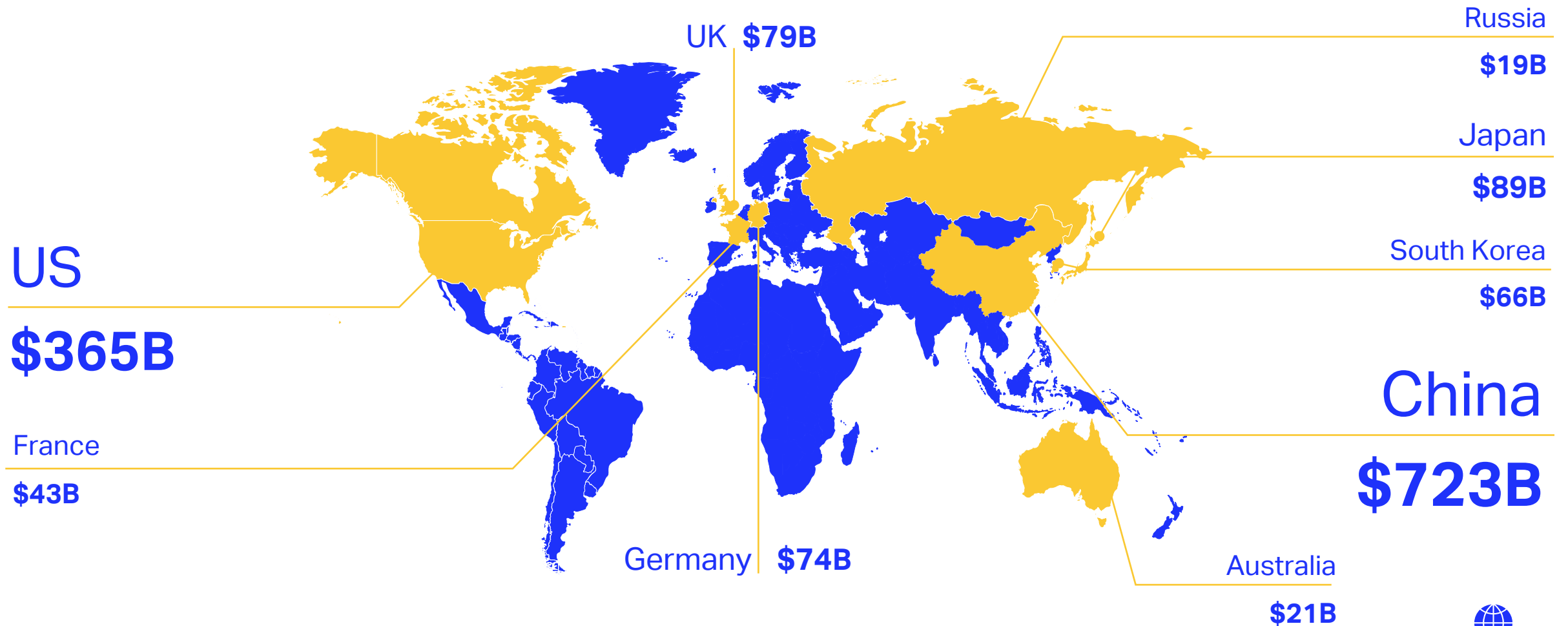
Head of E-Commerce & Cargo  
Operations [majeres@iata.org](mailto:majeres@iata.org)

19 April 2022





# E-Commerce Global Distribution - 2019

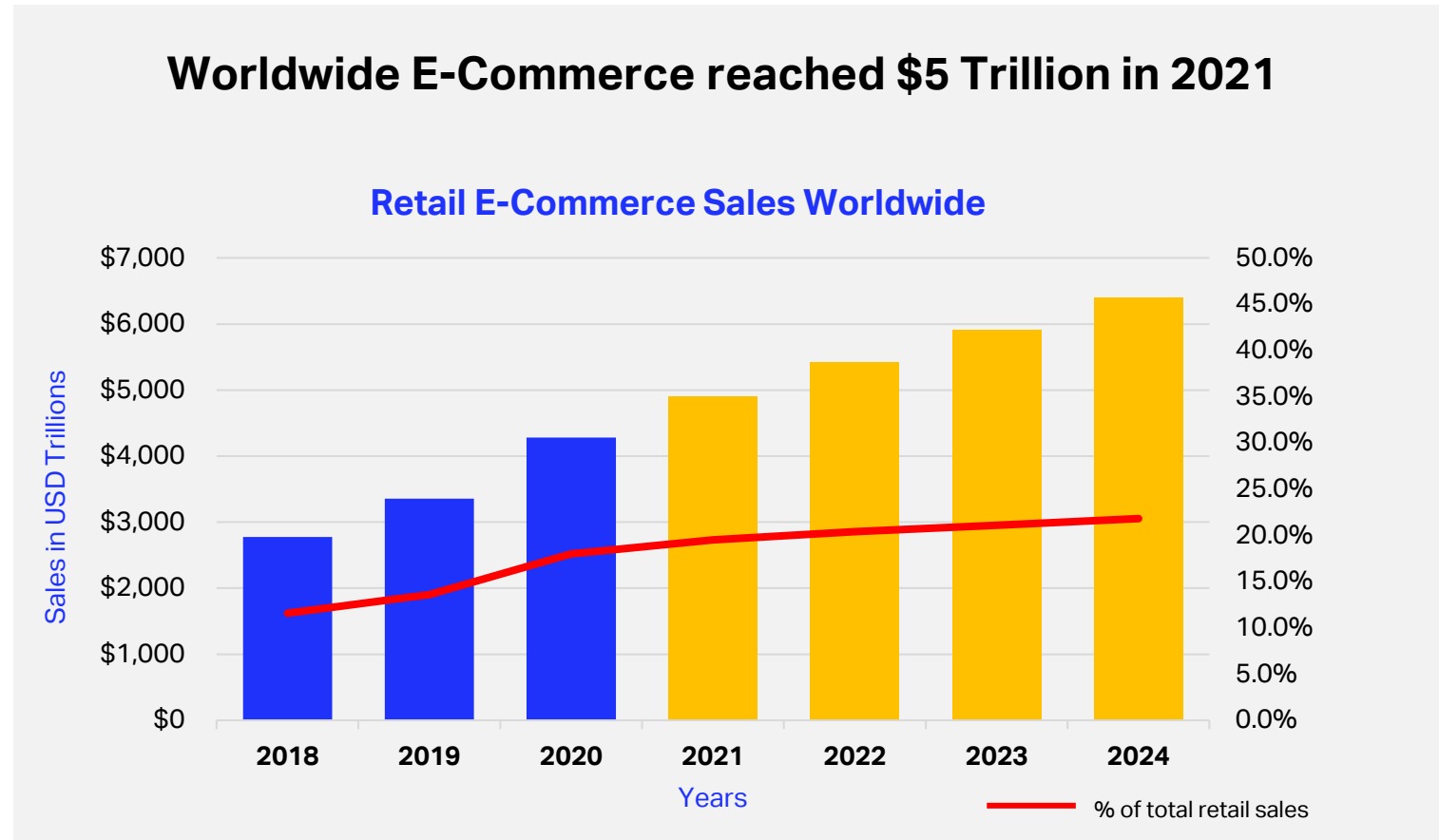


Source: Statista

\* Figures currently including services, already identified source for potentially excluding services, at sales levels, potential to include share of the top-50 players by country



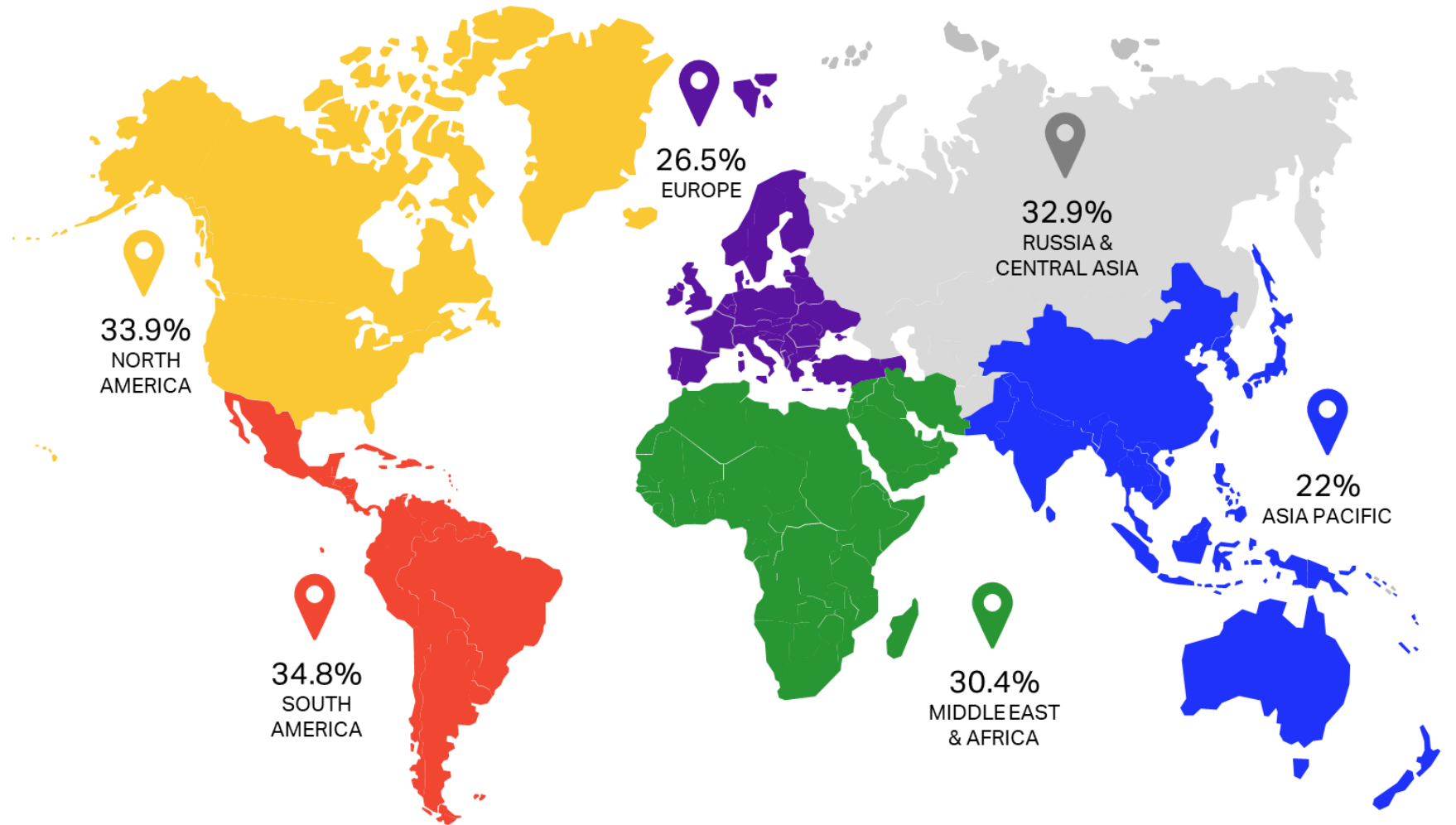
# Consumer behavior changed in 2020



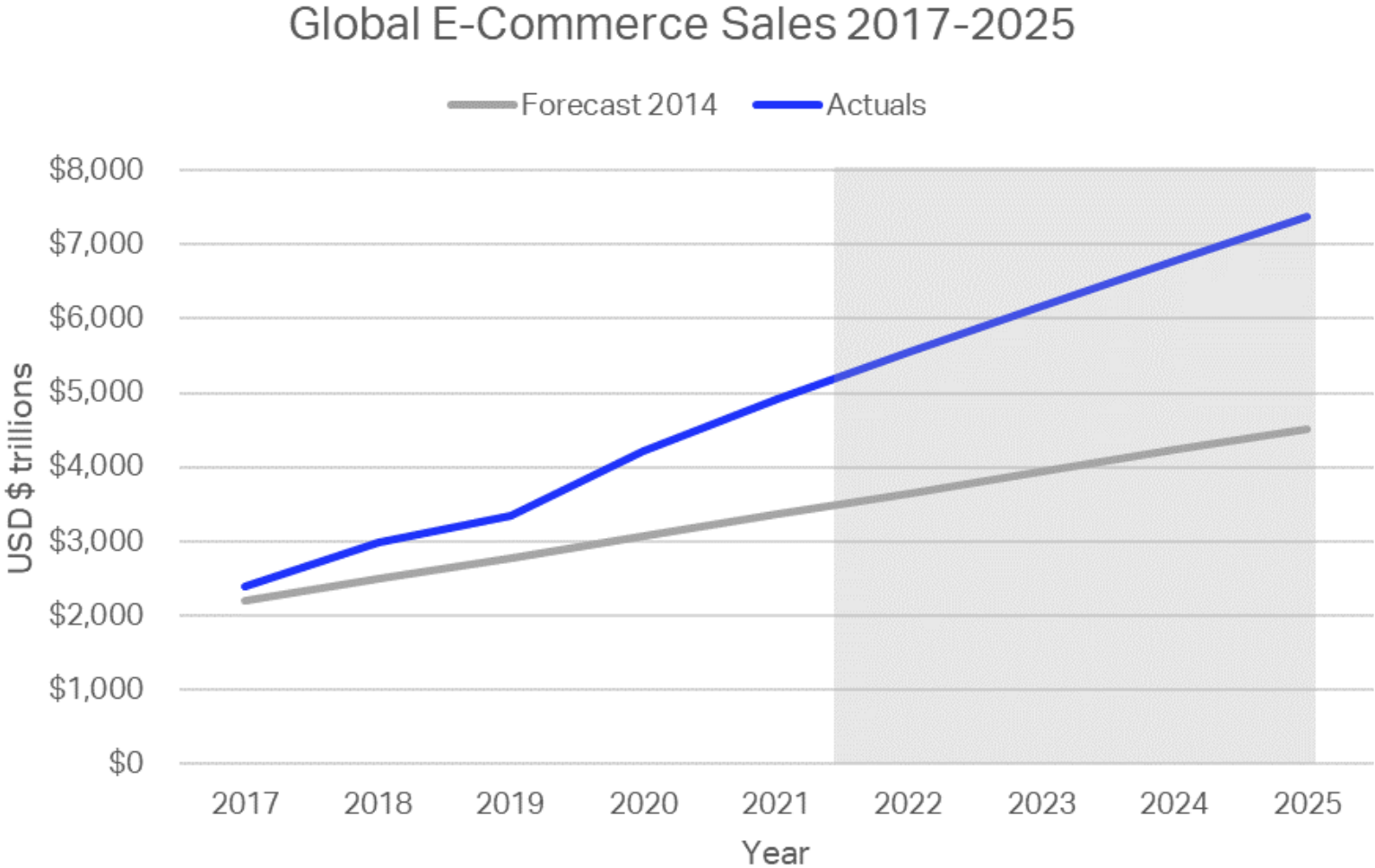
Source: <https://www.emarketer.com/>; <https://www.freightwaves.com>



# E-Commerce - Volume growth - 2021



# Forecasts have underestimated e-Commerce

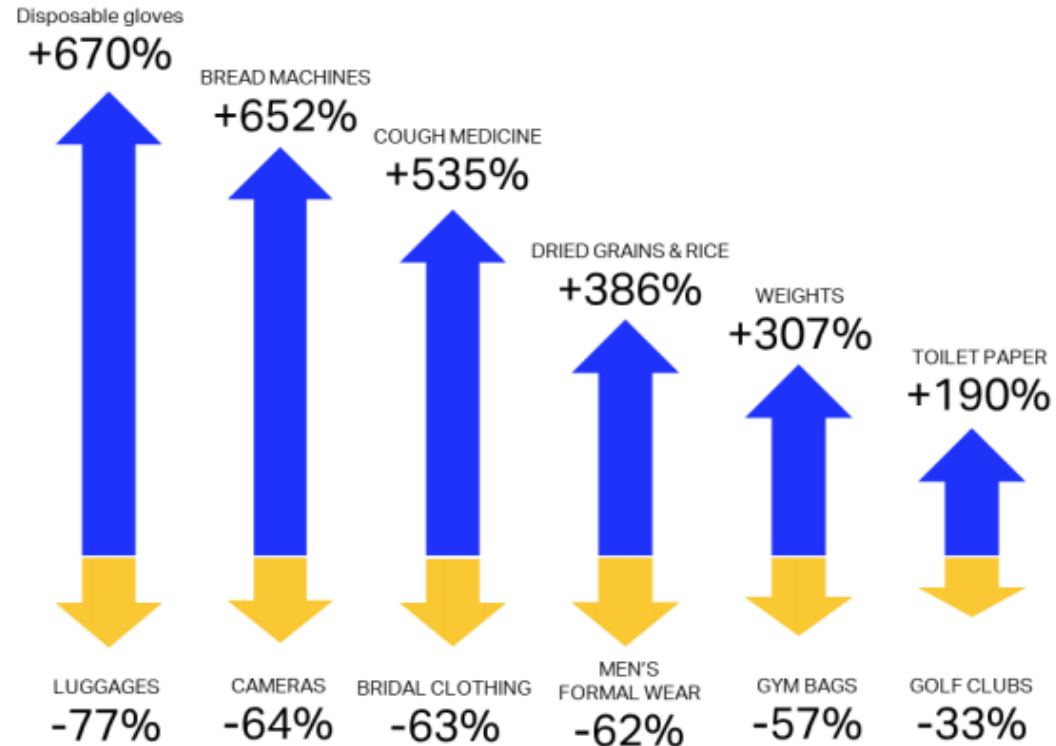


# Consumer behavior during the pandemic



In 2021, online buyers  
predicted to reach  
**2.14 billion**

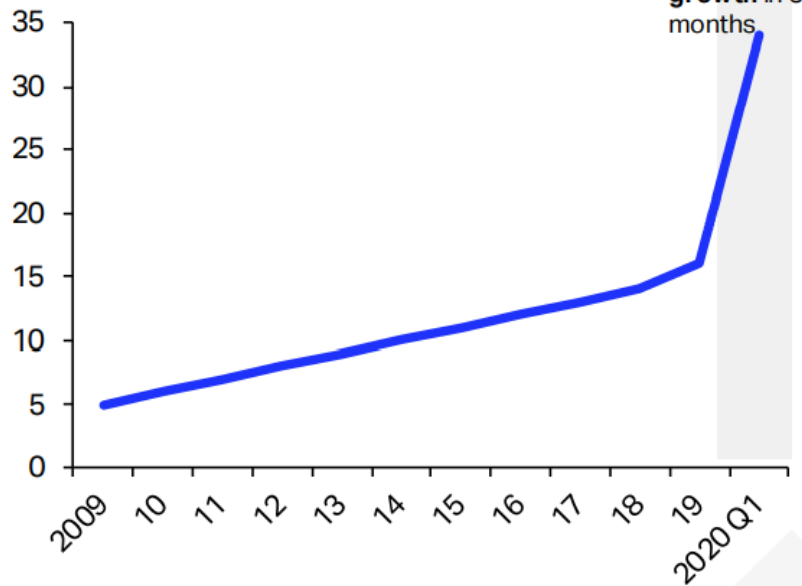
## Shift in consumer priorities due to COVID-19



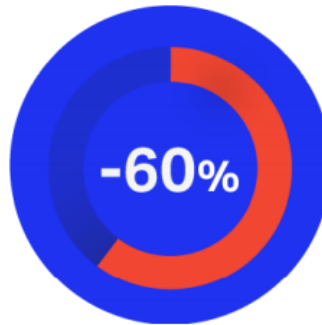
# Anchored trend or addiction ?

## E-commerce moved 10 years in 90 days

US e-commerce penetration, %



According to McKinsey & Co\*, "E-commerce has moved **10 years ahead in just 90 days.**" However, there has also been a decrease of 60% in postal parcels sent, due to lack of capacity.



Drop in postal parcels

## e-Commerce Events 2021



\* Dates to be confirmed

[iata.org/e-commerce](https://iata.org/e-commerce)

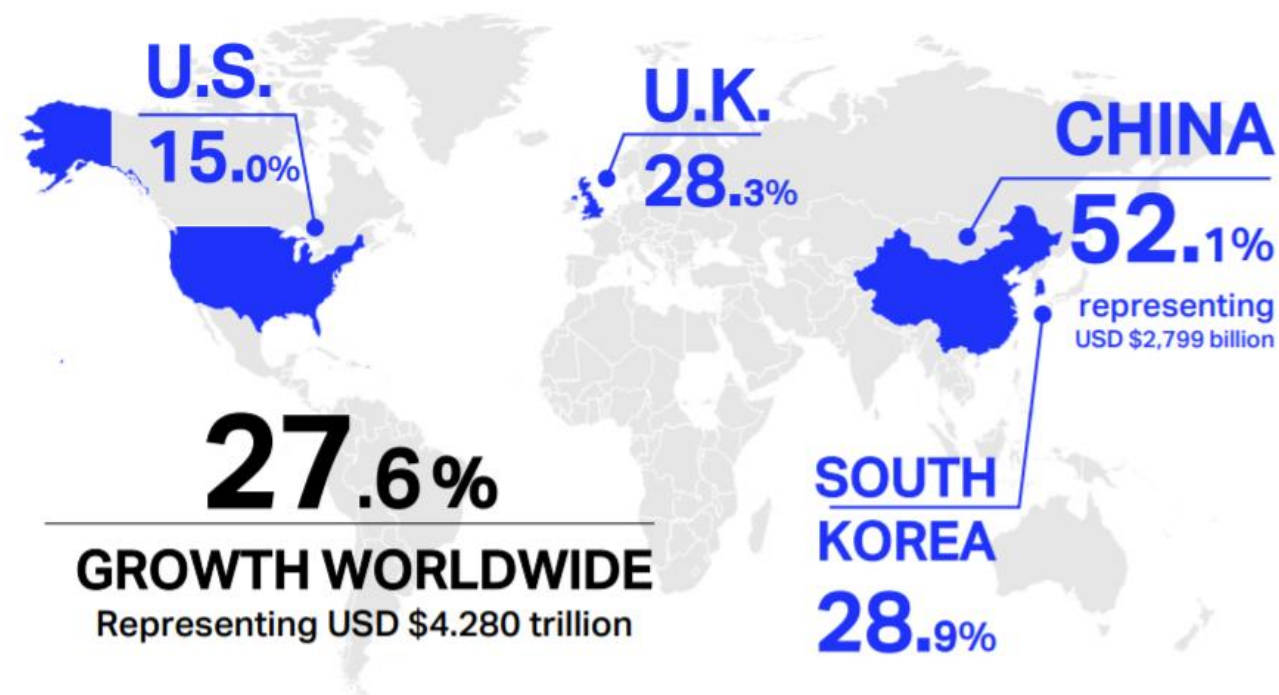


# One year after the beginning of the pandemic

Thanks to the global roll-out of vaccinations, consumers are slowly returning to brick-and-mortar stores, supermarkets, restaurants, and cultural events.

But even if we can already start to feel like we are returning to a sense of normalcy, the transition will take time.

## Total online retail sales 2021



# Pandemic Period e-Commerce Growth

COVID-19 has grown E-Commerce exponentially across the world, especially in the U.S., Latin America, Europe and China

**3** years ahead

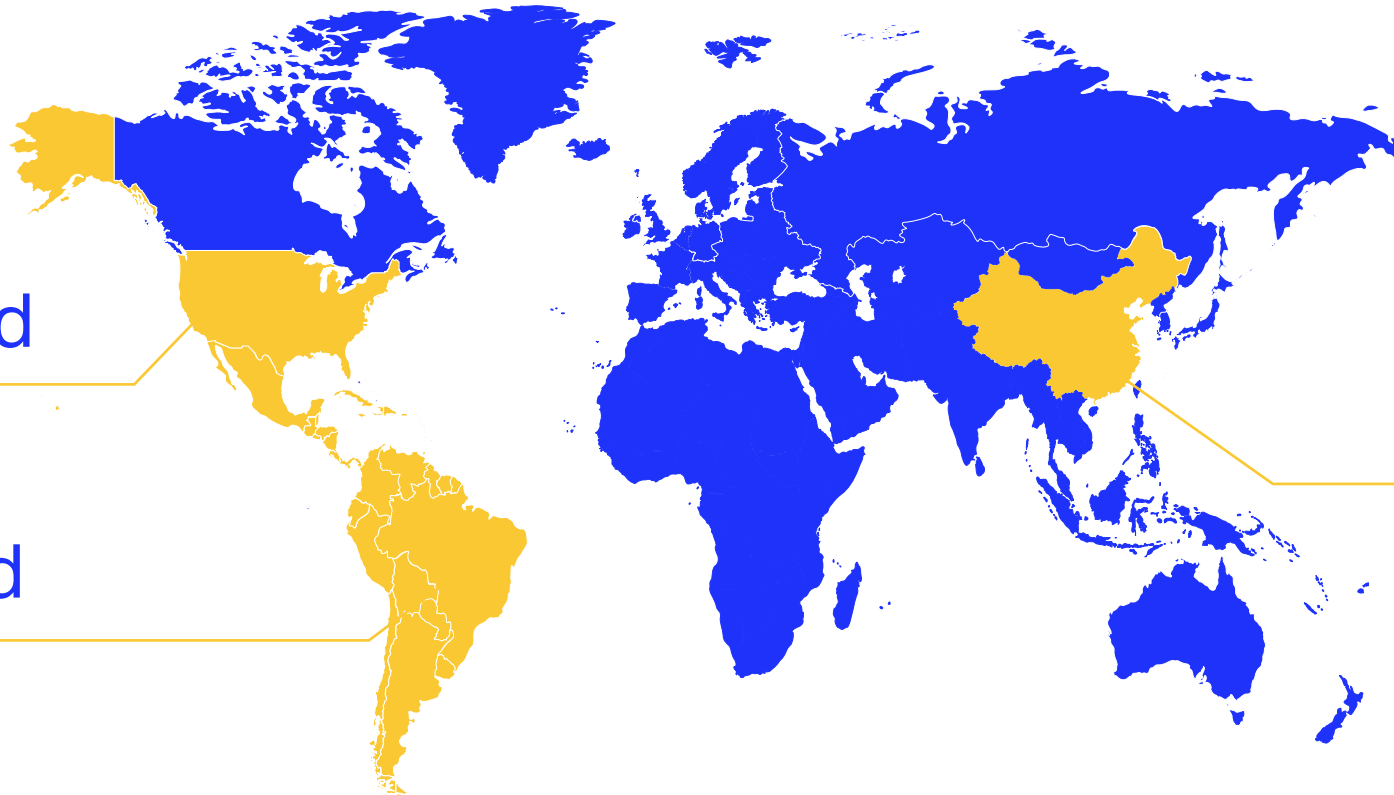
United States

**5** years ahead

Latin America

**2** years ahead

China





# A few numbers... from the giants

Alibaba - 84.5 Bn\$

JD - 48.7 Bn\$

**2.3**  
BILLION PACKAGES

LOGISTICS BEHIND 11.11

3 MILLION  
WORKERS



500,000  
TRUCKS



4,000  
PLANES

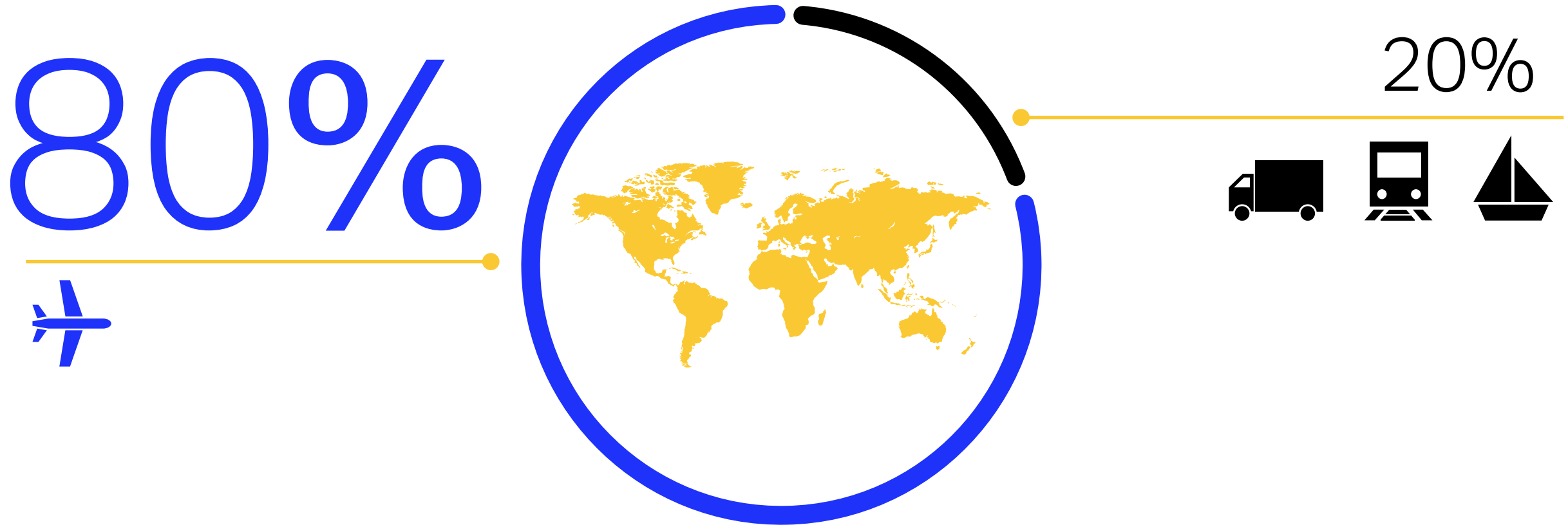
430 billion  
sheets of paper saved in  
6 years equivalent to  
**43 million**  
trees

**127.5 billion**  
packages | 2025  
equivalent to a carbon footprint of  
**116 million tons**

**86 Million**  
Meters of plastic  
tape were saved  
due to the use of  
**190,000** zipper  
boxes during  
11.11.2020  
Enough to wrap around the world twice

More than 80% of 11.11 orders were predicted  
by Cainiao's AI algorithm based on shopper's behavior.

# Cross-border B2C e-Commerce



Cargo represent today approximately 35% of airlines' revenues... and approximately 18-20% of air cargo is eCommerce, forecasted to be 22% in 2022.

Source: ICAO, McKinsey, PwC Analysis



# The e-Commerce Logistics Landscape

The COVID-19 crisis has accelerated the expansion of e-Commerce towards new companies, customers, and product types.

The pandemic has added diversity in a sector that was already very dynamic, with many different players, big and small, and various business models

**Top-50 e-commerce players**

1 Taobao* 	2 TMall* 	3 Lazada & AliExpress 	4 Amazon 	5 JD.com 	6 ebay 	7 Pinduoduo 	8 Shopify 	9 Rakuten 	10 Apple 
11 Yahoo JP 	12 Mercado Libre 	13 OTTO 	14 Wish 	15 Jumia 	16 1688* 	17 Suning 	18 Walmart 	19 Alibaba* 	20 vip.com 
21 Snapdeal 	22 Shopee 	23 The Home Depot 	24 Zalando 	25 Lojas Americanas 	26 Wayfair 	27 macy's 	28 Flipkart 	29 Best Buy 	30 allegro 
31 Target 	32 carousell 	33 Etsy 	34 Cnova 	35 Bukalapak 	36 MSH 	37 Bol.com 	38 Asos 	39 Yandex 	40 Newegg 
41 Wildberries 	42 GFG 	43 Farfetch 	44 Cool Blue 	45 Nasper's eMAG 	46 Digitec 	47 Citilink 	48 M.video 	49 Wehkamp 	50 Qoo10 

\* Part of the Alibaba Group

# Air cargo models & e-tailers

## Owned and fully dedicated air transport capabilities

Firms reduce their dependence on 3rd party carriers, limiting risks and increasing margins.

## Air freight shippers

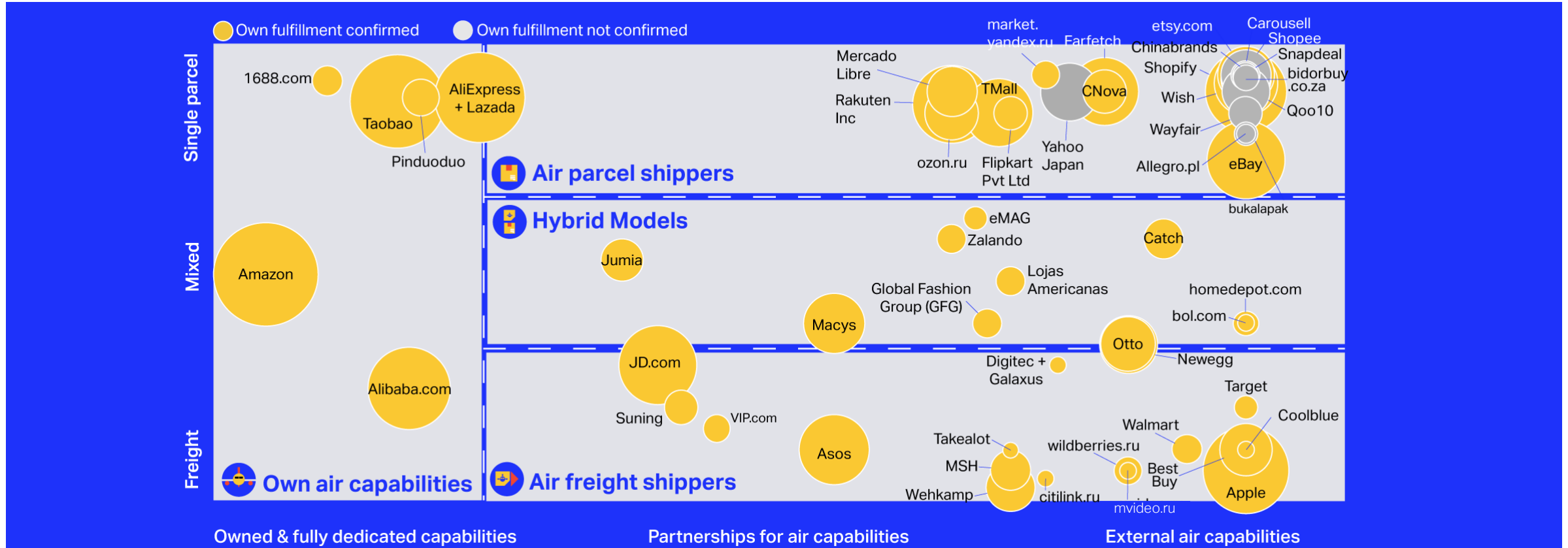
Companies move the goods to fulfillment centers in freight format and perform local ground distribution in the destination country

## Hybrid model

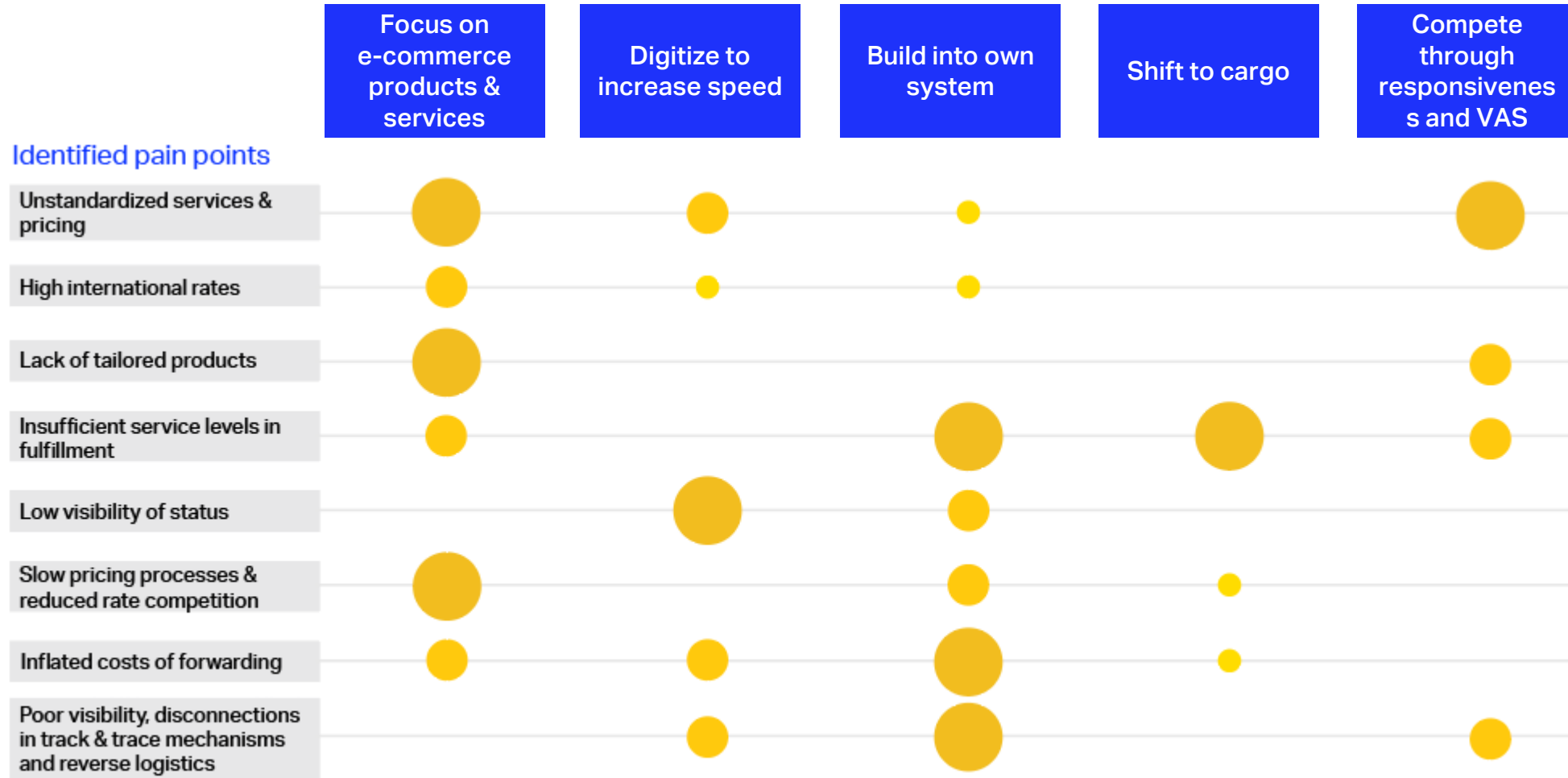
Mixed-use of internal and external capabilities to move freight to fulfillment centers, and also shipping of single parcels to consumers via air cargo

## Air parcel shippers

Firms rely on standard Courier-Express-Parcel & airmail. It is common for marketplaces due to their high dispatch fragmentation



# Five strategies for transformation



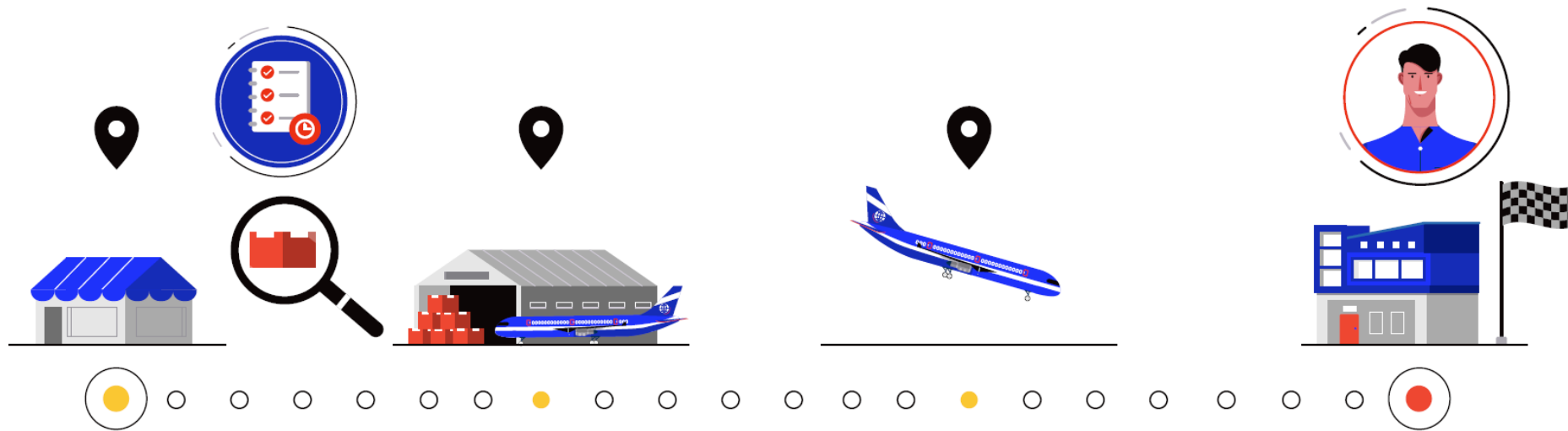
**80%**  
of cross border e-commerce is transported by air

**36%**  
air cargo airline revenue in 2020

**82%**  
of consumers want recyclable packaging



# Transform to build a robust air cargo



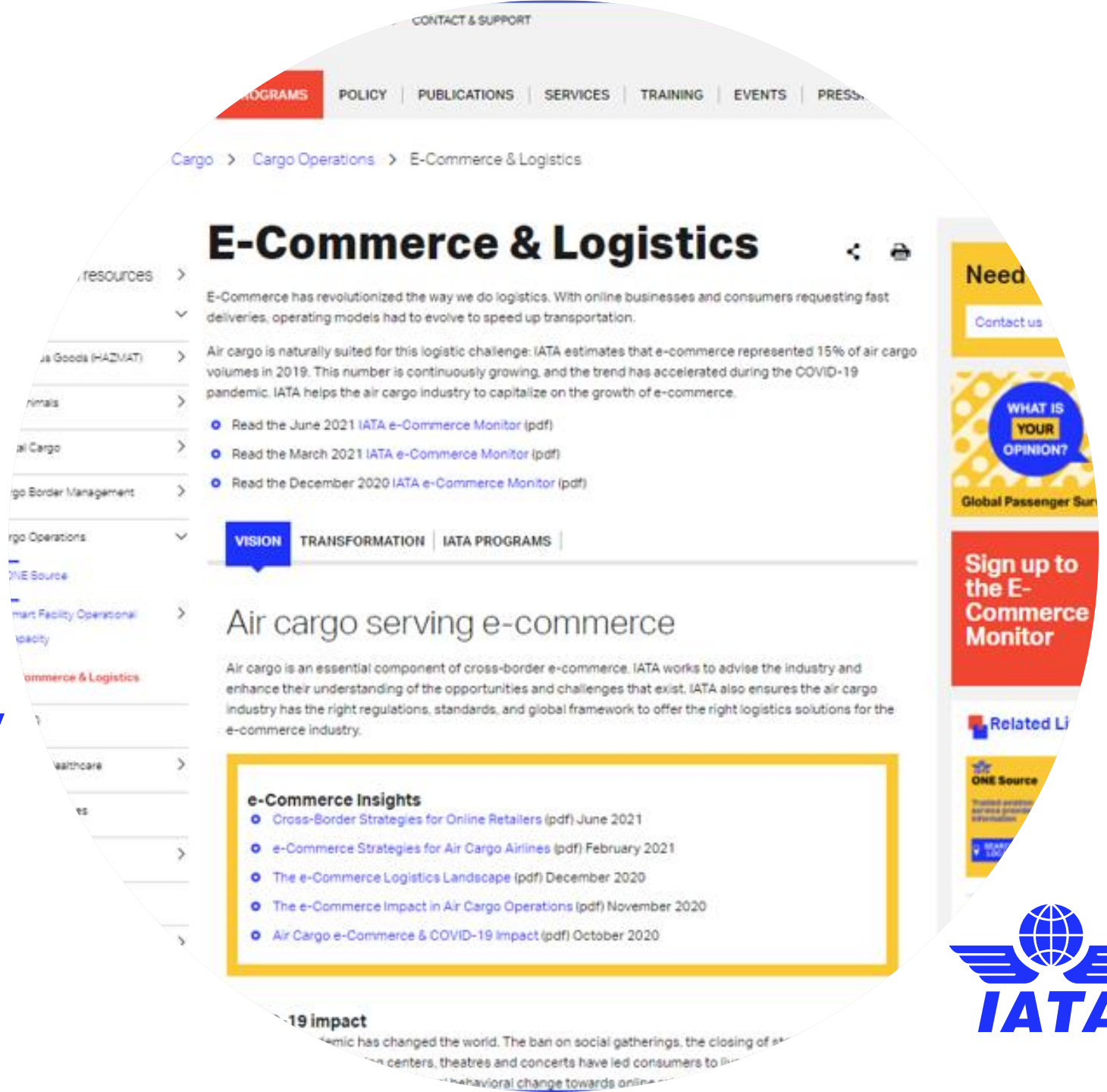
COVID-19 has accelerated e-commerce penetration and solidified the shift in consumer behavior.

e-commerce is key for industry prosperity/survival

carriers need to address existing pain points through the 5 strategies in order to adapt to e-tailers needs

Before the pandemic, e-Commerce was key to air cargo...

Now air cargo is key to e-Commerce



# Thank you

More information, insight articles  
and the IATA e-Commerce  
Monitor are available at  
[www.iata.org/ecommerce](http://www.iata.org/ecommerce)

**Andre Majeres**

Head of E-Commerce & Cargo Operations  
[majeres@iata.org](mailto:majeres@iata.org)





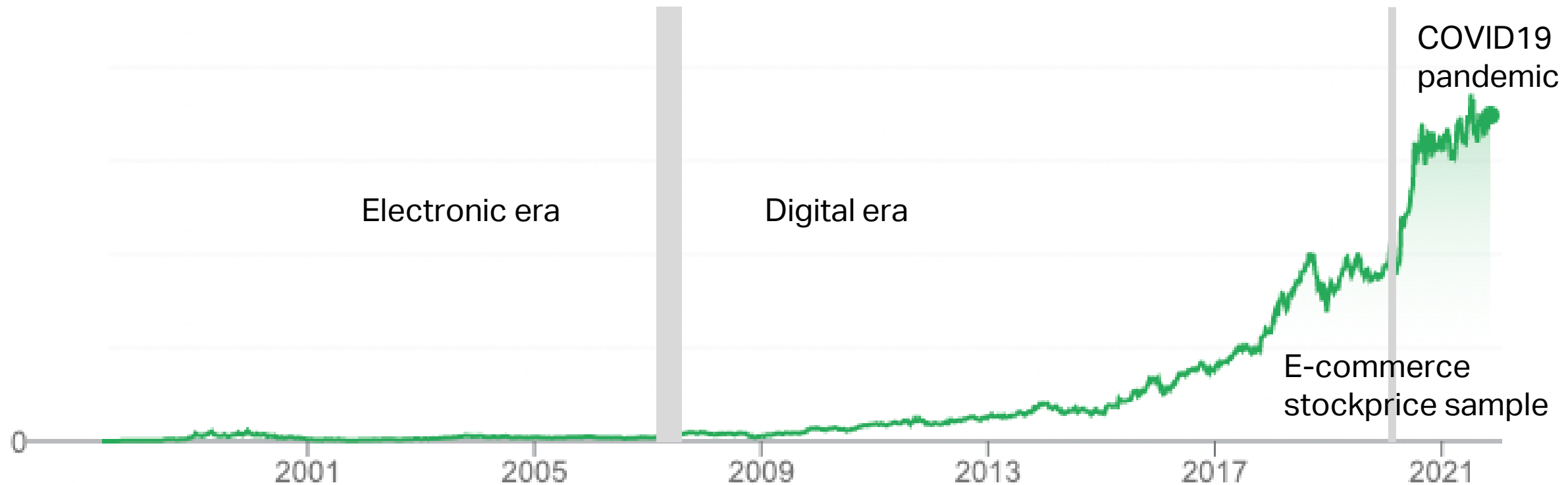
# E-Commerce digitalization & IATA

Henk Mulder  
Head, Digital Cargo  
IATA



# Why digitalization of air cargo? Why now?

By 2025: 24.3% of the global economy is digital (vs 15.5 % in 2016)<sup>1</sup>



- 1) Oxford Economics

# Digital needs for e-Commerce

## Visibility

- Real time issue detection and management

## Trackable

- Customer process transparency and predictability

## Fast

- Avoid data lag. No time to "look for data"

## Shared data

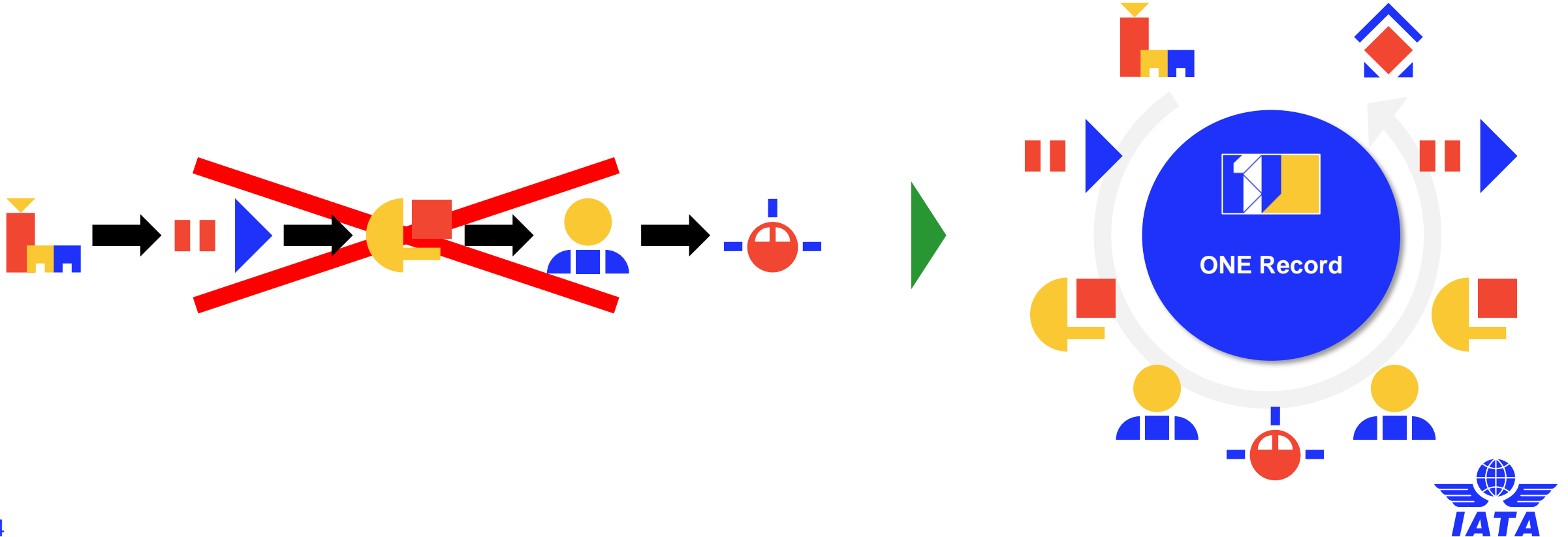
- Access to heterogeneous and shared supply chain and logistics

## End-to-End

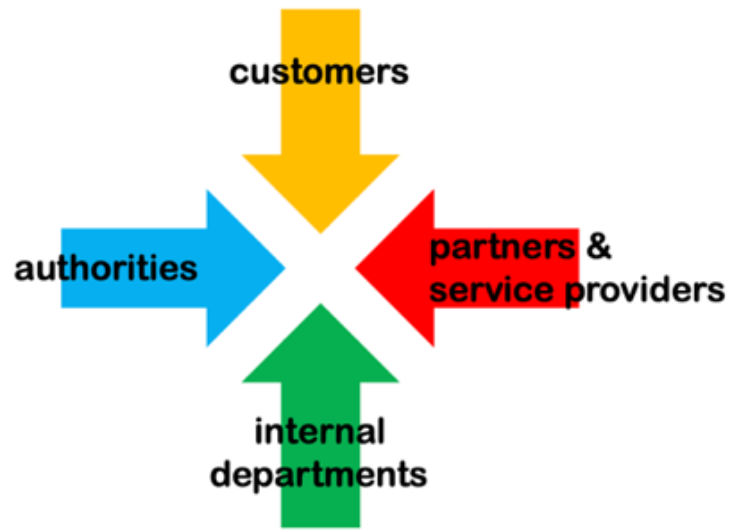
- Shipper to consignee and multimodal

# Information exchange in air cargo

- From sequential messaging to data sharing
- From airline-forwarder to end-to-end and multimodal



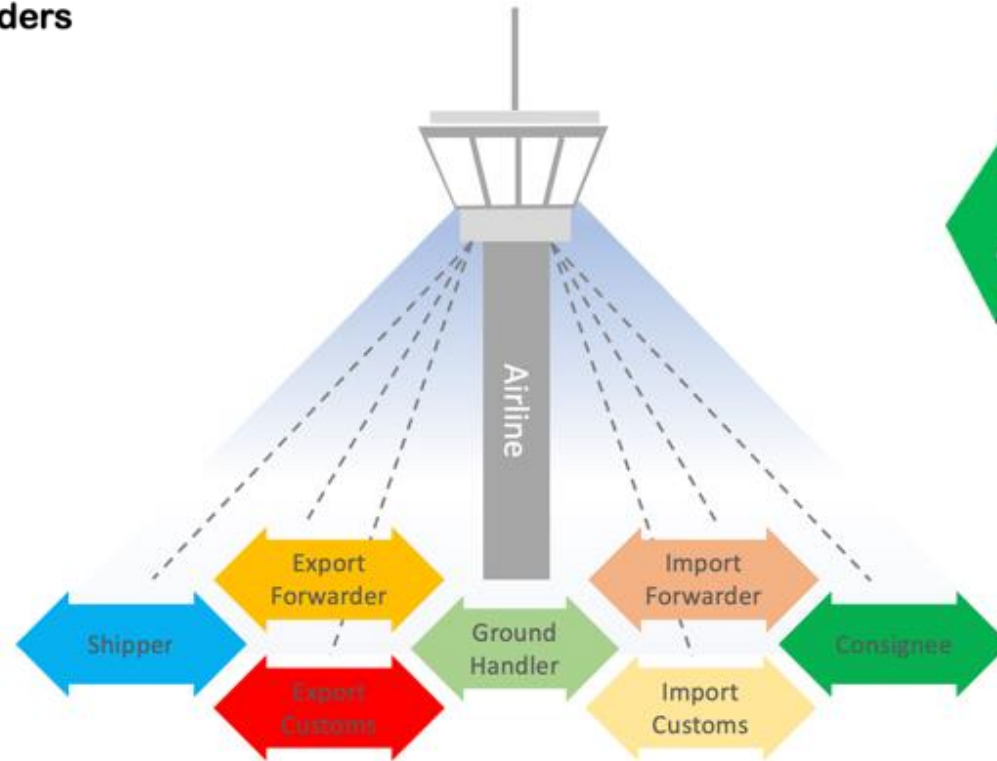
# ONE Record: driving digital transformation



**Direct connectivity  
without intermediaries**

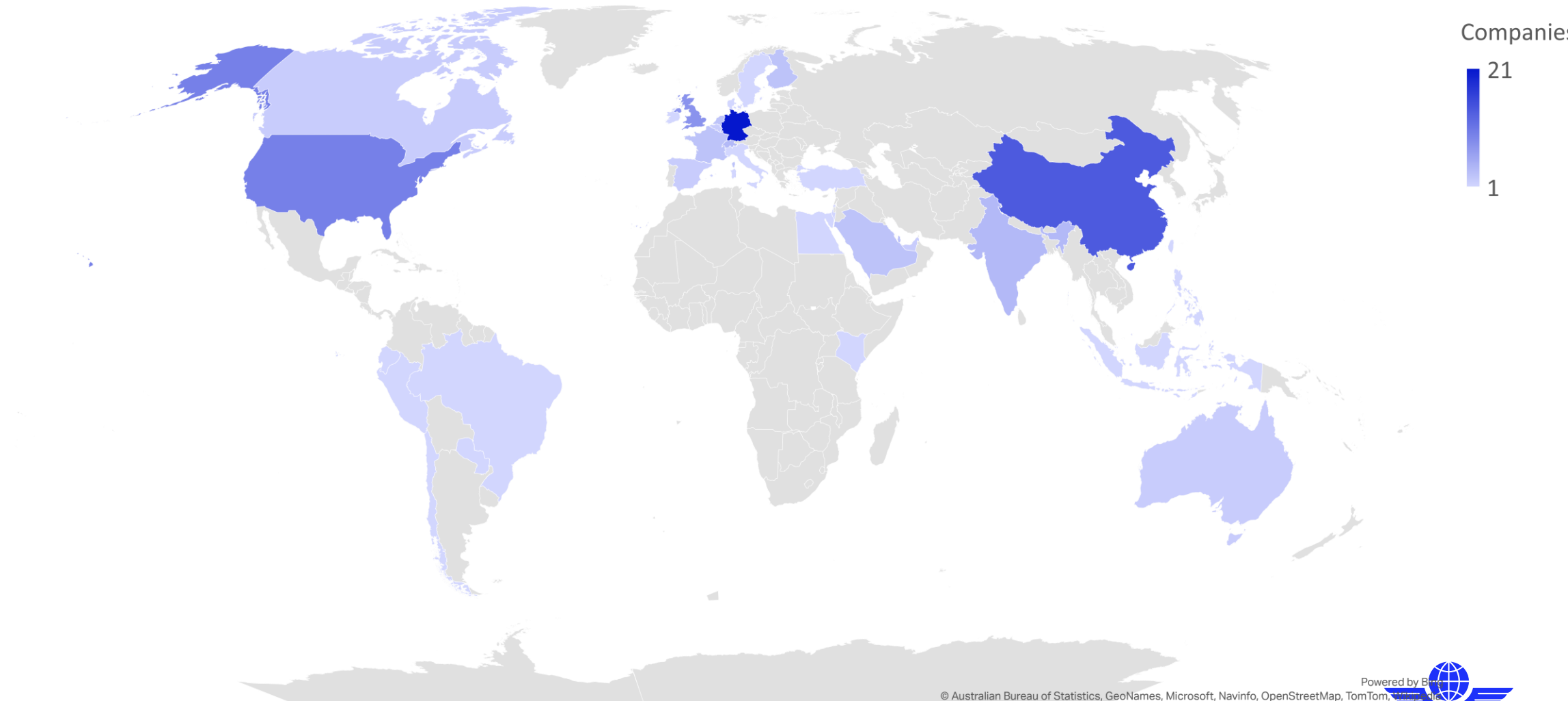


**Digital Transformation**

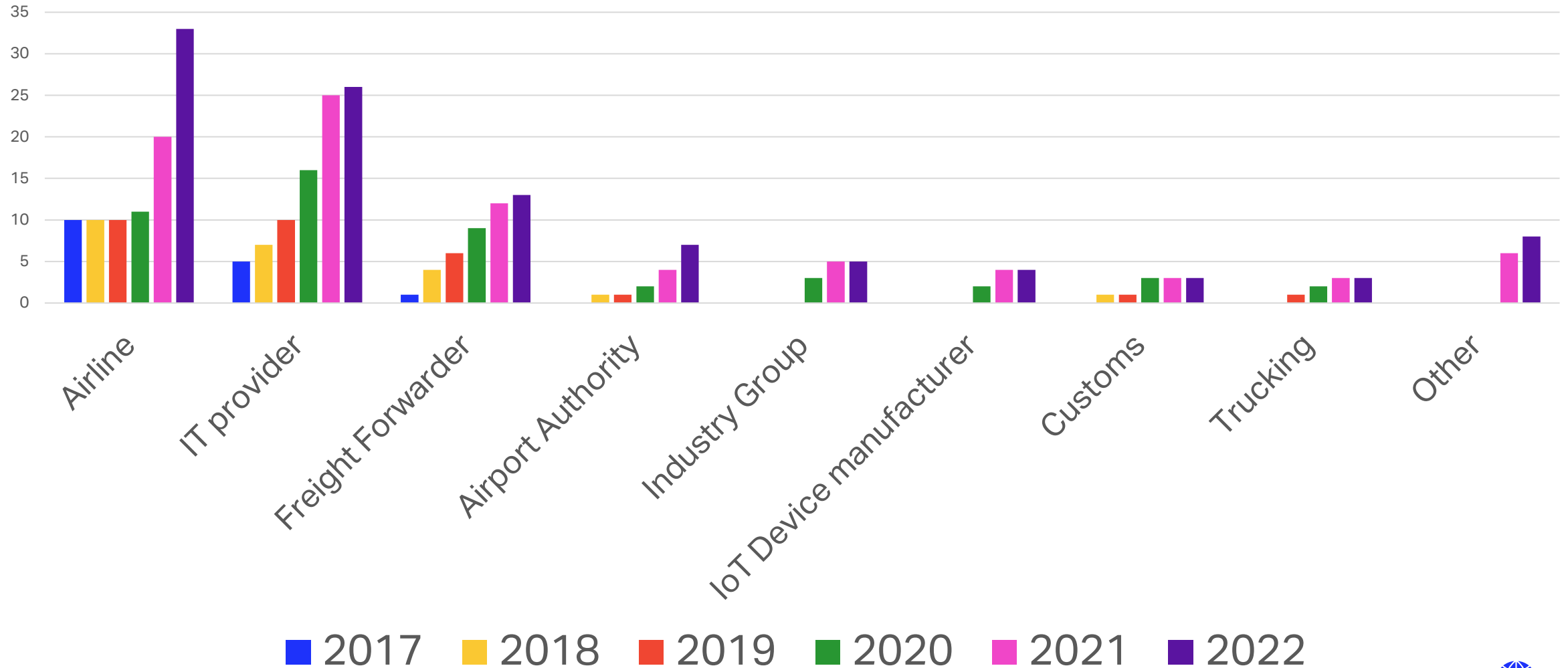


**Data access and visibility**

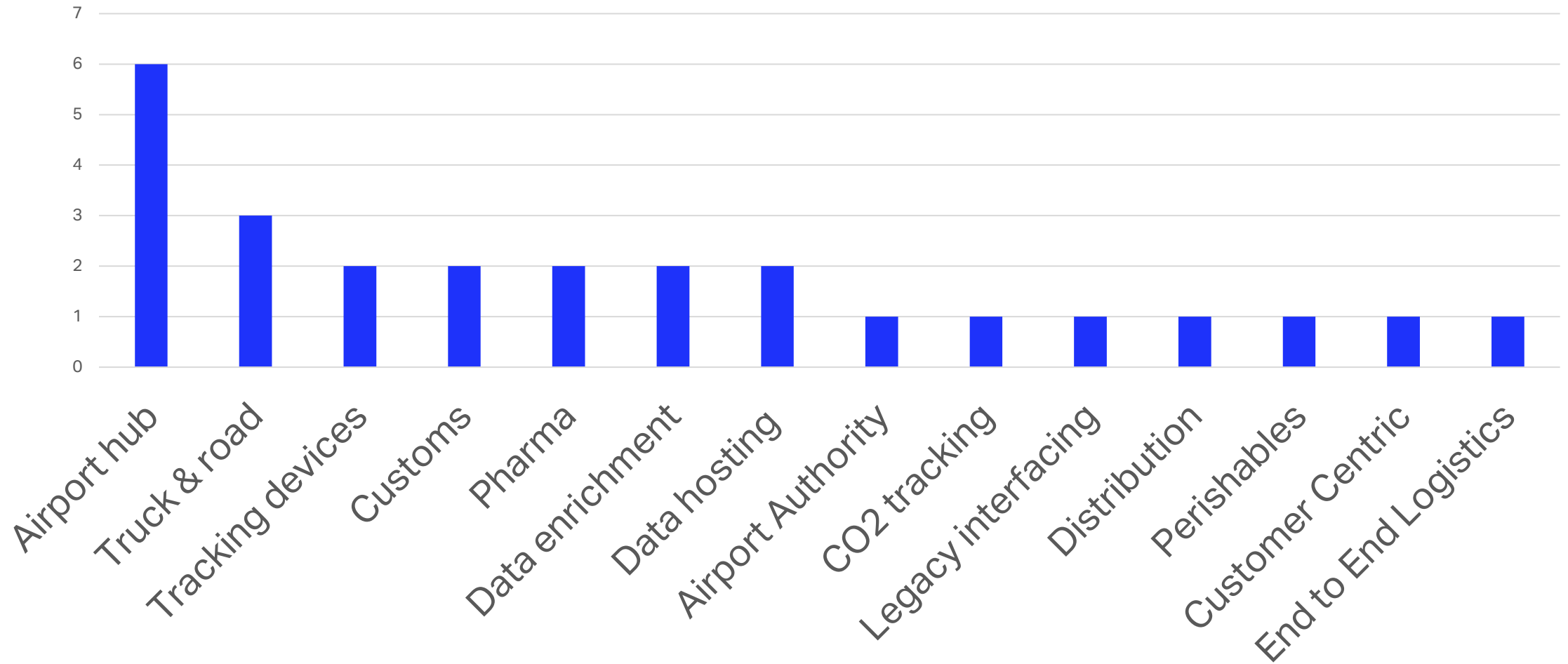
# ONE Record global deployment



# ONE Record stakeholder group by year



# ONE Record use cases





# Cooperation is the opportunity

e-Commerce is a global

e-Commerce uses most transport modes

e-Commerce uses most logistics channels

e-Commerce accesses many types of shippers, small & large

e-Commerce accesses many customer segments



# Paper-free transports

Webinar  
13-04-2022



**postnord**

# Paper-free transports



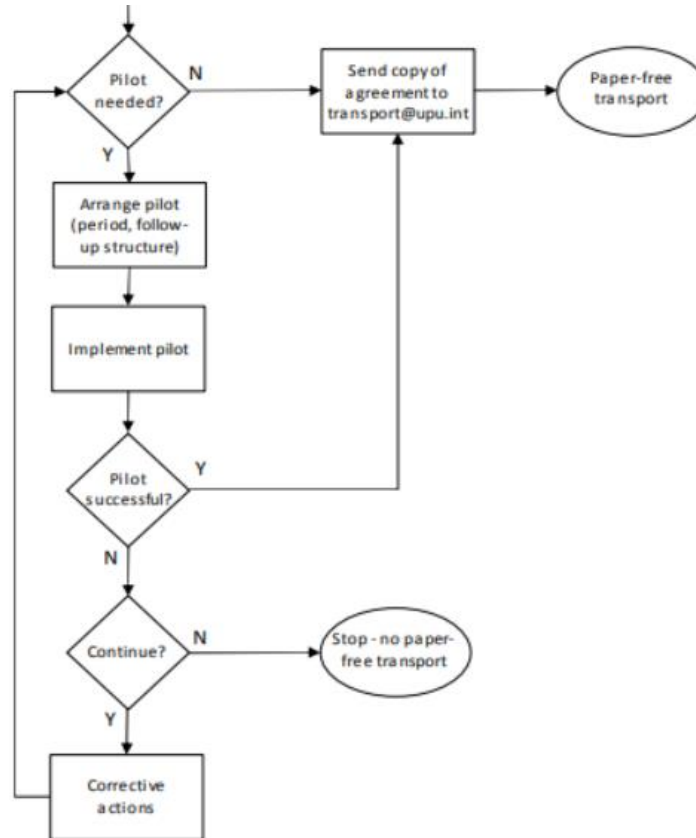
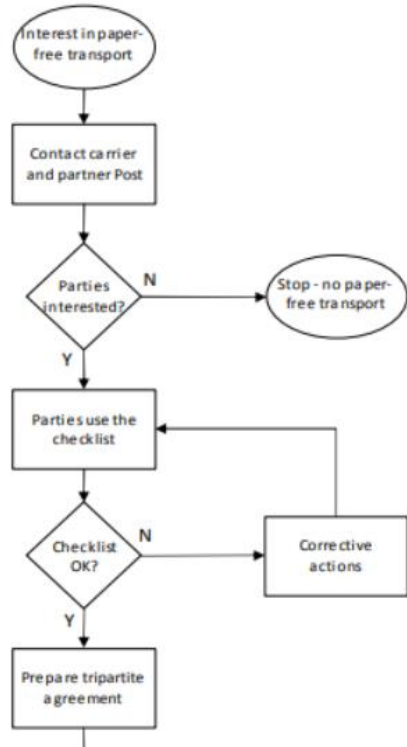
- The number of EDI messages and the quality of them have increased over the years
- Both Posts and Carriers wish to improve our common processes using EDI
- Paper-free transports is one of the topics we are working on
- Paper-free transports started as an activity within Engage. Now it is a global activity
- At the latest meeting in the UPU transport group an updated guideline for creating paper free transports was presented.



The Guidelines includes

- Background information
- Preconditions for paper-free transport
- Minimum requirements
- Scope of implementation
- Preparation and communication
- Paper-free operational and messaging procedures
- Checklist for implementing paper-free transports
- Template for Tripartite agreement
- Description of available tools

# Paper-free transports - process



# Paper-free transport



IATA UPU Contact committee decided to create a database with contacts to Posts and Carriers that are ready to implement Paper-free transports

For further information please contact

Jan Bojnansky, email: [jan.bojnansky@upu.int](mailto:jan.bojnansky@upu.int)

Hector Martin Arias, email:  
[hector.martinarias@ipc.be](mailto:hector.martinarias@ipc.be)

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# Questions?

