

IATA Air Cargo Day Africa – Day 1



Johannesburg, South Africa

8-9 November 2023

swissport



AIRLINES ASSOCIATION OF SOUTHERN AFRICA



Opening and Introduction



Alex Stancu

Area Manager – Southeast Africa – AME, IATA

swissport



AIRLINES ASSOCIATION OF SOUTHERN AFRICA



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Welcome and set the scene



Sandile Chipunza

Manager External Affairs & Sustainability– AME, IATA

IATA Competition Law Compliance

- Participants are cautioned that any discussion regarding matters such as fares, charges, division or sharing of traffic or revenues, or concerning any other competitively sensitive topics outside the scope of the agenda is strictly prohibited.
- As a result, questions pertaining to individual policies or commercial decisions and/or being subject to bilateral commercial discussions between airlines and their suppliers or customers will not be answered.



Agenda – Day 1

Operations

- Keynote Speech
- Air Cargo Outlook
- Focus on Safety
- Infrastructure and Cargo Standards
- Focus on Pharma and Certifications
- Sustainability
- Products and Training



Keynote Speech – Safety & Security



Ms. Poppy Khoza

Director General South Africa Civil Aviation Authority

Keynote Speech - Sustainability



Ms. Mpumi Mpofu
CEO Airport Company South Africa

Keynote Speech - Transformation



Ms. Khangis Khoza

CEO Swissport South Africa (Pty) Ltd.

Global and Regional Air Cargo Trends



Emma Dayo

Regional Manager Cargo & Ground operations, Africa Middle East
IATA

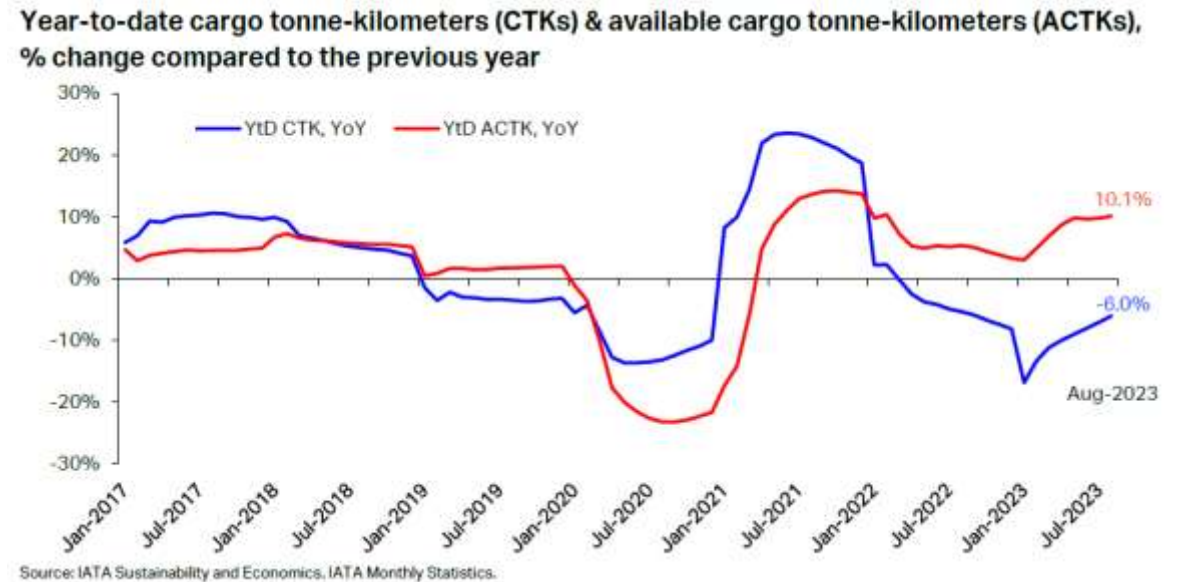
Cargo maintains recovery trend amid challenges

After an outstanding performance in 2021, air cargo demand faced consecutive year-on-year (YoY) declines in 2022, a trend that persisted until July 2023.

However, August marked a turning point with the first annual growth since February 2022. The annual growth of ACTKs in August outpaced the previous month by 1.6 percentage points, primarily driven by the sustained strong growth of belly cargo capacity during the summer season, recording a 30.0% YoY increase.

In contrast, international capacity growth for dedicated freighters remained sluggish in August, with only a 2.0% YoY increase.

This recovery, coupled with the YTD performance, underscores the resilience of the air cargo sector as it adapts to challenges and evolving dynamics in the global economy and travel industry.



General Air Cargo Market

Challenges are mounting

- The war in Ukraine has grounded some key players and disrupted supply chains
- Economic volatility has brought inflation, a weaker trading environment, shifting currency rates and slower GDP growth
- Concerns on how China's economy is developing

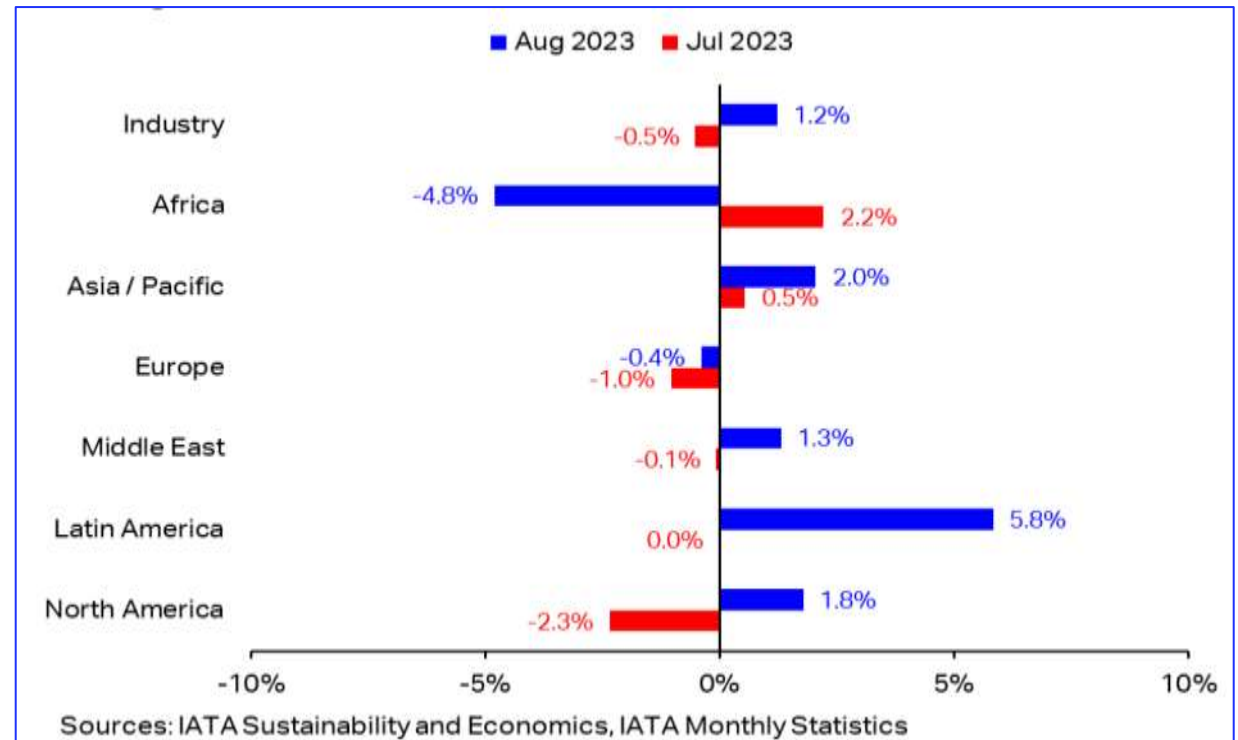
Positive developments

- E-commerce continues to grow
- Shorter delivery times
- The strong rebound of passenger traffic brings more belly capacity for cargo
- And high-value specialized cargo, such as pharma products, are proving resistant to economic ups-and-downs

Growth in international CTKs by airline region of registration (YoY)

International CTKs on the major trade lanes maintained the overall momentum in August.

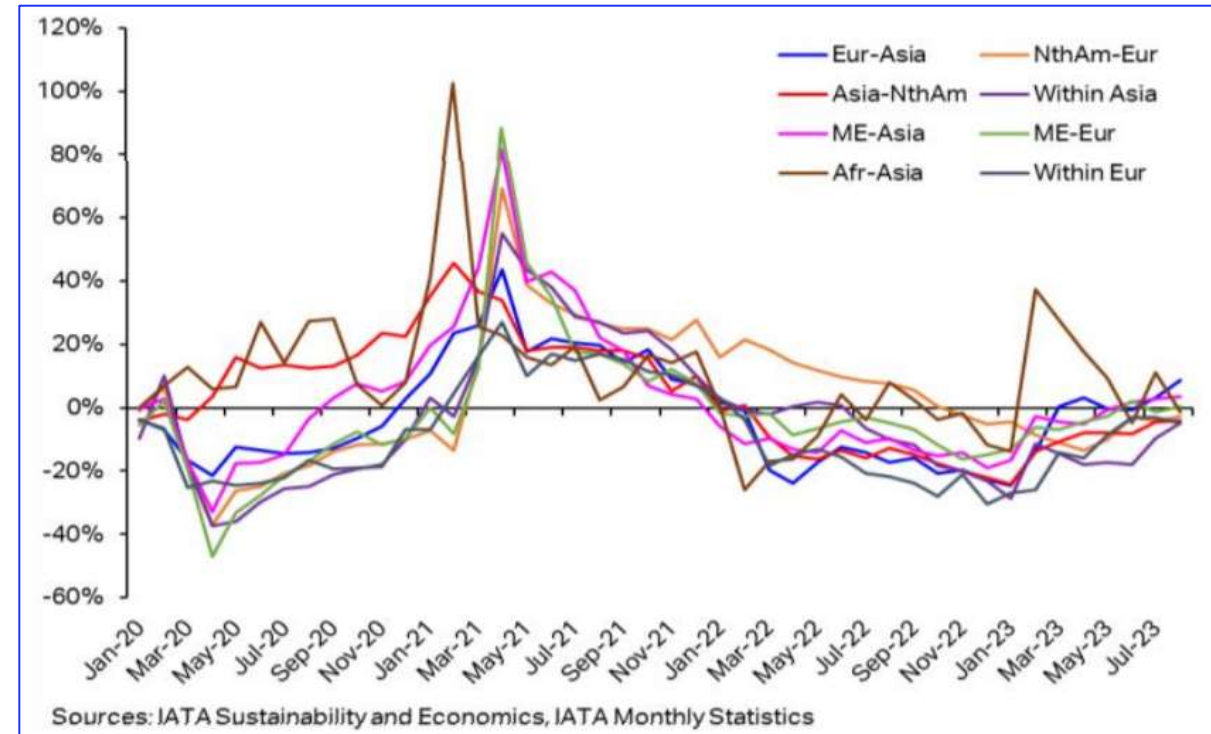
The annual growth rates in CTKs improved on all major trade lanes compared to the previous month, with the only exceptions being the Africa – Asia and Within – Europe markets.



Growth in international CTKs by airline region of registration (YoY)

The **Africa** – Asia and Within – Europe markets were the only two major trade lanes that expanded their annual contractions from the July levels. International CTKs on the **Africa** – Asia trade lane declined by 1.1% this month, from their 11.2% growth in July.

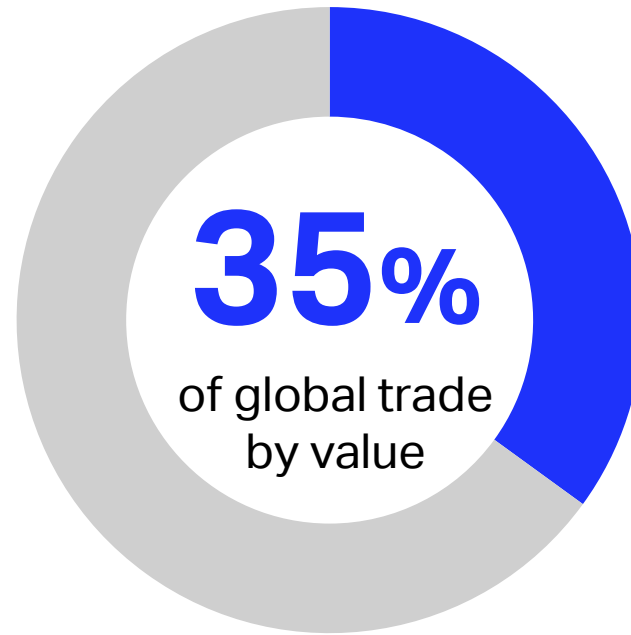
International CTKs of **African** airlines declined by 4.8% from a relatively high base in 2022 but also affected by the softened traffic on the Africa – Asia trade lane.



The value of air cargo



>65 million tons
of cargo a year



US \$6.8 trillion
worth of goods



24H in Air Cargo

80'000
flowers
transported



1.1M
smartphones
transported



\$18.6B
value in
cargo shipped



20M
parcels
sent



6'849
lives
saved





Cargo changes & saves lives

Aviation plays an essential role in emergency relief operations



362
million

People in need
of humanitarian
assistance and
protection in
2023



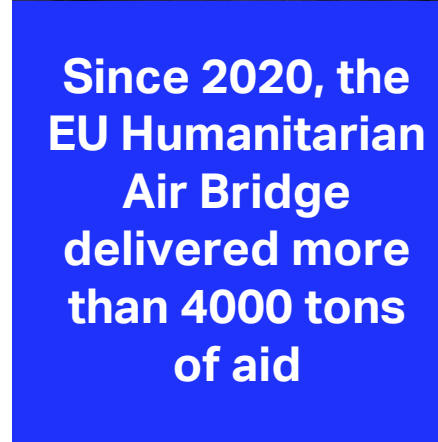
Cargo
delivered by
the UN
Humanitarian
Aviation
Service in 2022



7000
megatons



165
operations



Since 2020, the
EU Humanitarian
Air Bridge
delivered more
than 4000 tons
of aid



What are the industry priorities?



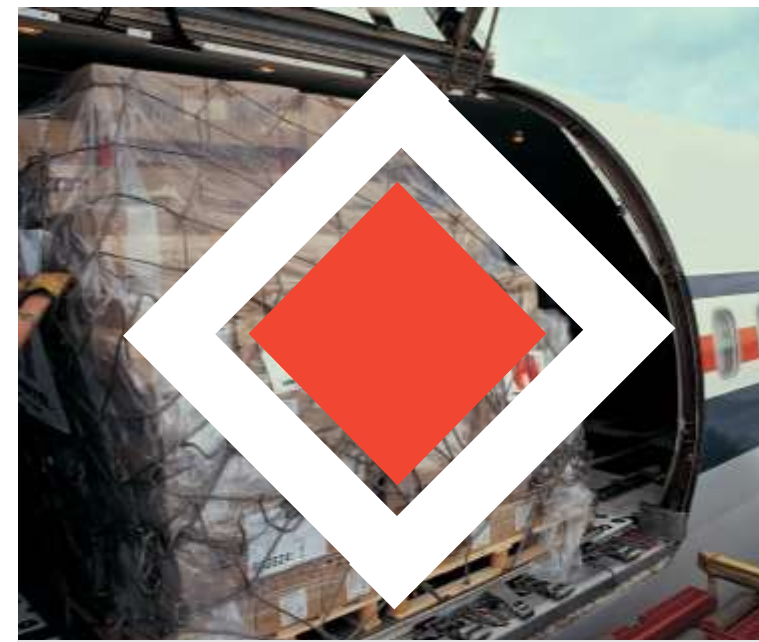
Digitalization

Move from the legacy messaging standard that is 50 years old to a data-sharing approach based on web APIs.



Sustainability

Support industry Net Zero commitments, increase efficiency and reduce waste in air cargo operations



Safety & Security

Securing and facilitating cross-border movements.

What do we do to support these priorities ?

IATA defines and delivers a set of consistent initiatives to support the 3 industry priorities

	Advocacy	Standard Setting	Commercial Products & Services
Digitalization	<ul style="list-style-type: none">▪ Digital Transport & Logistic Forum (DTLF) of the EU Commission▪ FEDeRATED Consortium	<ul style="list-style-type: none">▪ ONE Record▪ Interactive Cargo▪ Cargo XML▪ Cargo iQ	<ul style="list-style-type: none">▪ Cargo XML toolkit▪ EPIC
Sustainability	<ul style="list-style-type: none">▪ Trade facilitation (WTO TFA)▪ Compliance with customs regulations / Risk assessment▪ Airmail & E-Commerce Logistics	<ul style="list-style-type: none">▪ Live Animal▪ Perishable Cargo▪ Temperature Control▪ Cargo Supply Chain Waste / Single use plastics	<ul style="list-style-type: none">▪ LAR, PCR, TCR, CTM▪ ONE Source▪ CCLPH▪ CargoIS, Cargo Direct Data▪ Cargo Consulting & Training
Safety & Security	<ul style="list-style-type: none">▪ Fire Resistant Container / Fire Containment Cover	<ul style="list-style-type: none">▪ Dangerous Goods▪ Lithium Battery Shipping▪ ULD▪ Infectious Substances Shipping▪ Operations and Handling	<ul style="list-style-type: none">▪ DGR, LBSR▪ ULDR▪ ISSR▪ ICHM▪ PLACI

Thank you

www.iata.org/cargo

Planes
carry planes



Air Cargo makes it happen.

Every plane has more than 300,000 individual components, and air cargo transports these plane parts.

iata.org



Your best friend
travels **first class**



Air Cargo makes it happen.

Over 2 million pets and other live animals are transported by air every year in the United States. Cargo ensures man's best friend gets there happily wagging his tail.

iata.org



Immunization
saves lives



Air Cargo makes it happen.

Vaccines prevent up to 3 million deaths every year. Air cargo safely transports pharmaceuticals in a safe, secure and temperature-controlled environment.

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Diamonds
are cargo's best friend!



Air Cargo makes it happen.

Botswana produces 24.4 million carats of diamonds, for a value of \$3.53 billion yearly. To move goods of such value, you really want them to arrive in the fastest and most secure possible way to their selling destination.

iata.org



Planes carry vaccines
to protect against COVID-19



Air Cargo makes it happen.

More than 3.52 billion people worldwide have received a COVID-19 vaccine, equal to over 38% of the world population. COVAX has shipped over 310 million COVID-19 vaccines so far.

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One-click, one-world
Reshaping a sustainable future



Air Cargo makes it happen.

COVID-19 has brought about a shift in consumer behavior to more sustainable packaging. The E-Commerce packaging market was valued at \$27.04 billion in 2020 and is expected to reach \$61.55 billion by 2025. 73% of consumers would prefer sustainable packaging.

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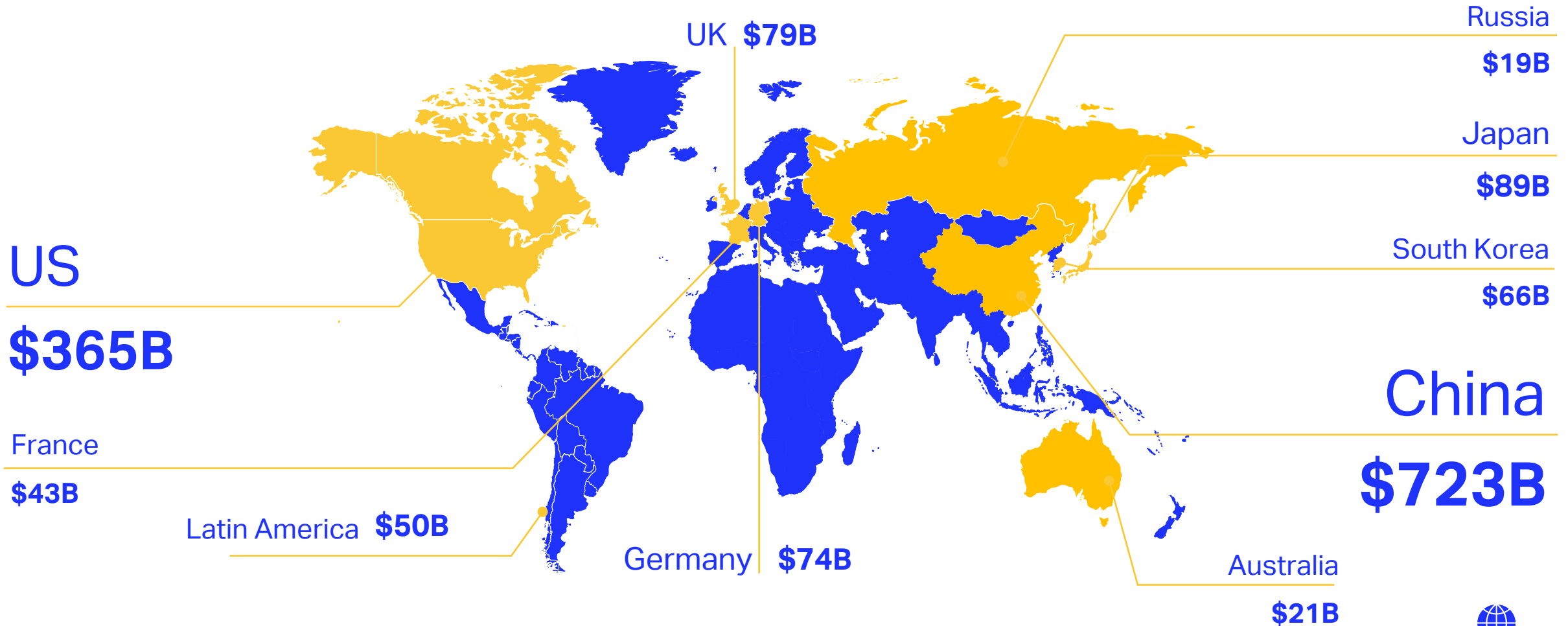
eCommerce Trend & Update



Andre Majeres

Head of eCommerce and Cargo Operations, IATA

E-Commerce Before The Pandemic - 2019

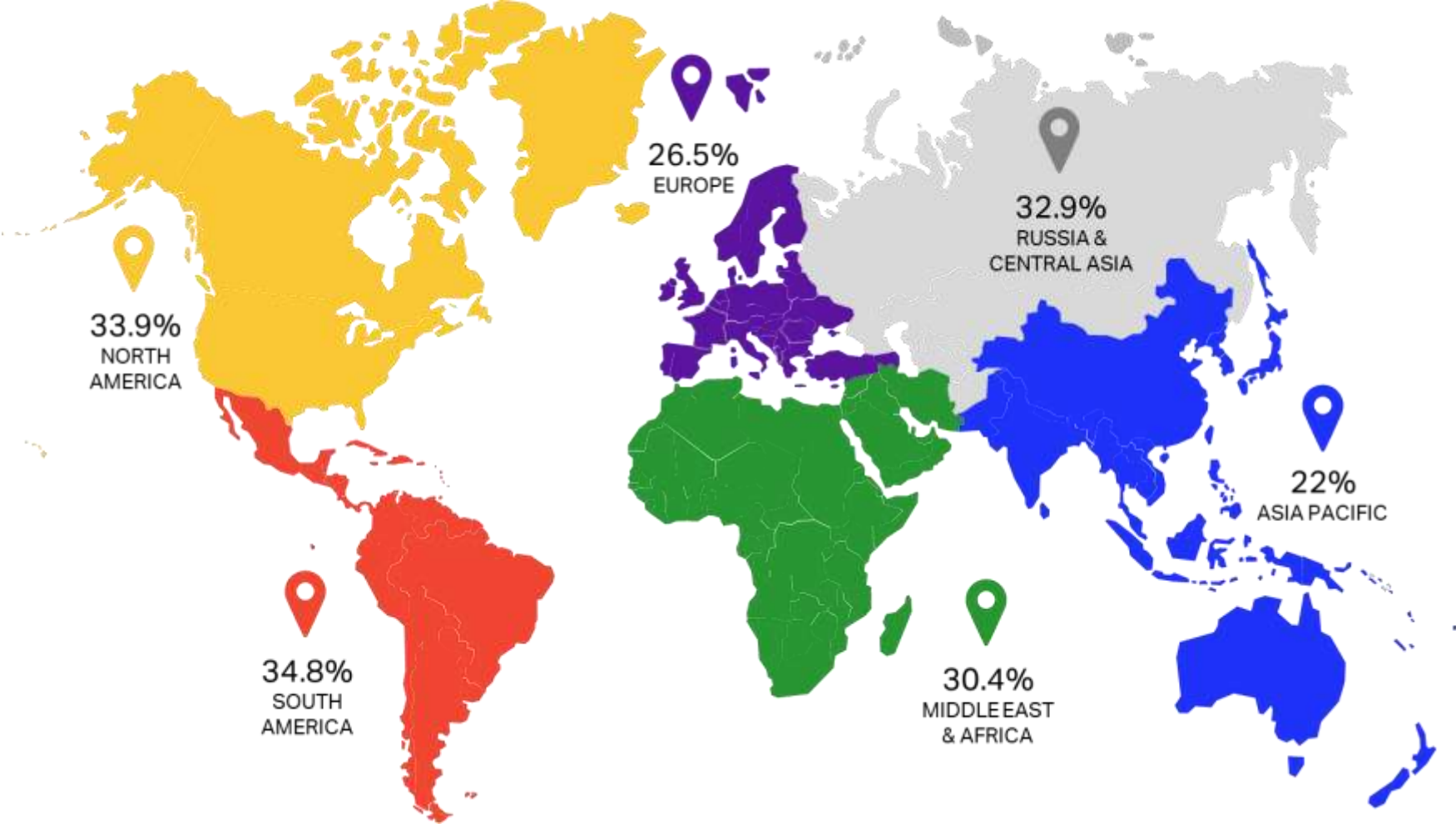


Source: Statista/DHL

* Figures including services

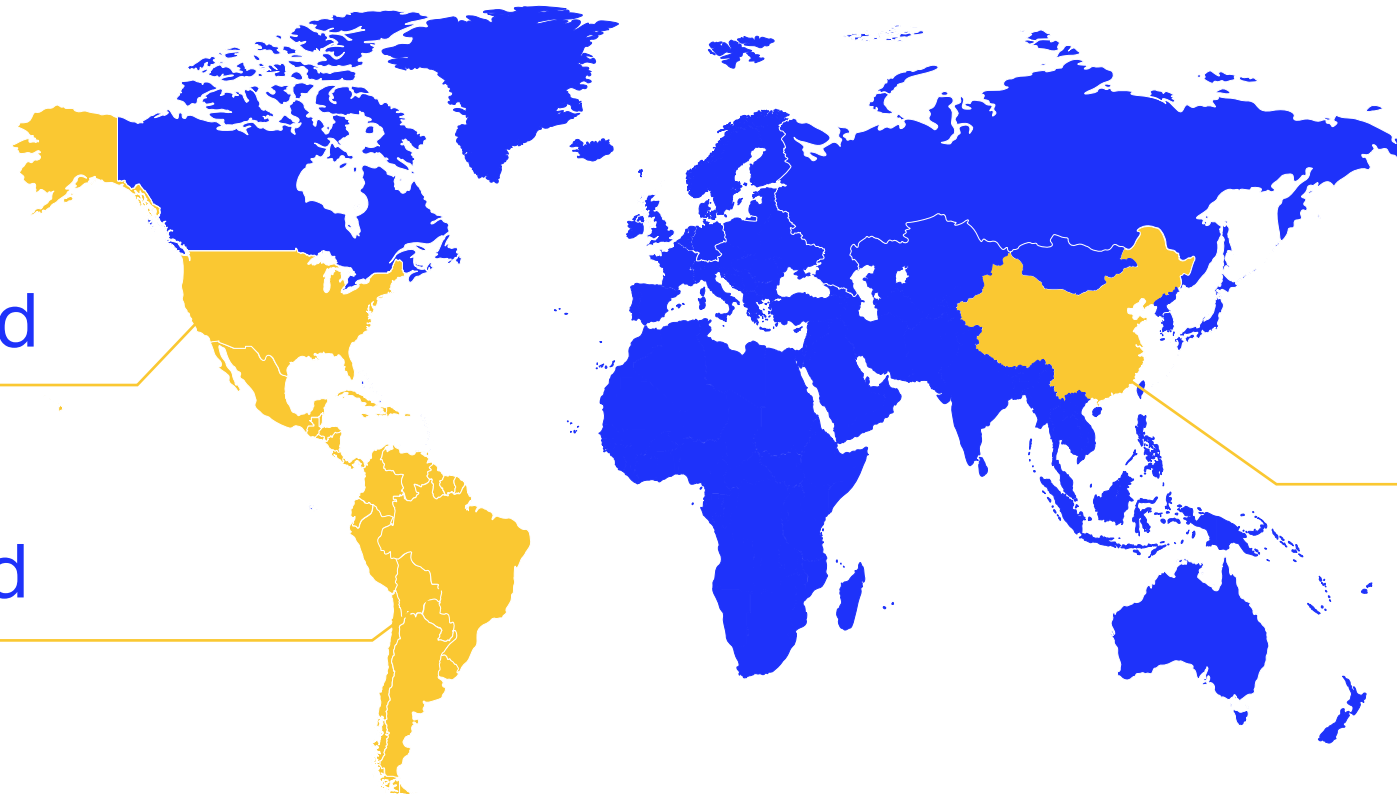


eCommerce Growth During The Pandemic- 2021



eCommerce Growth During The Pandemic- 2021

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

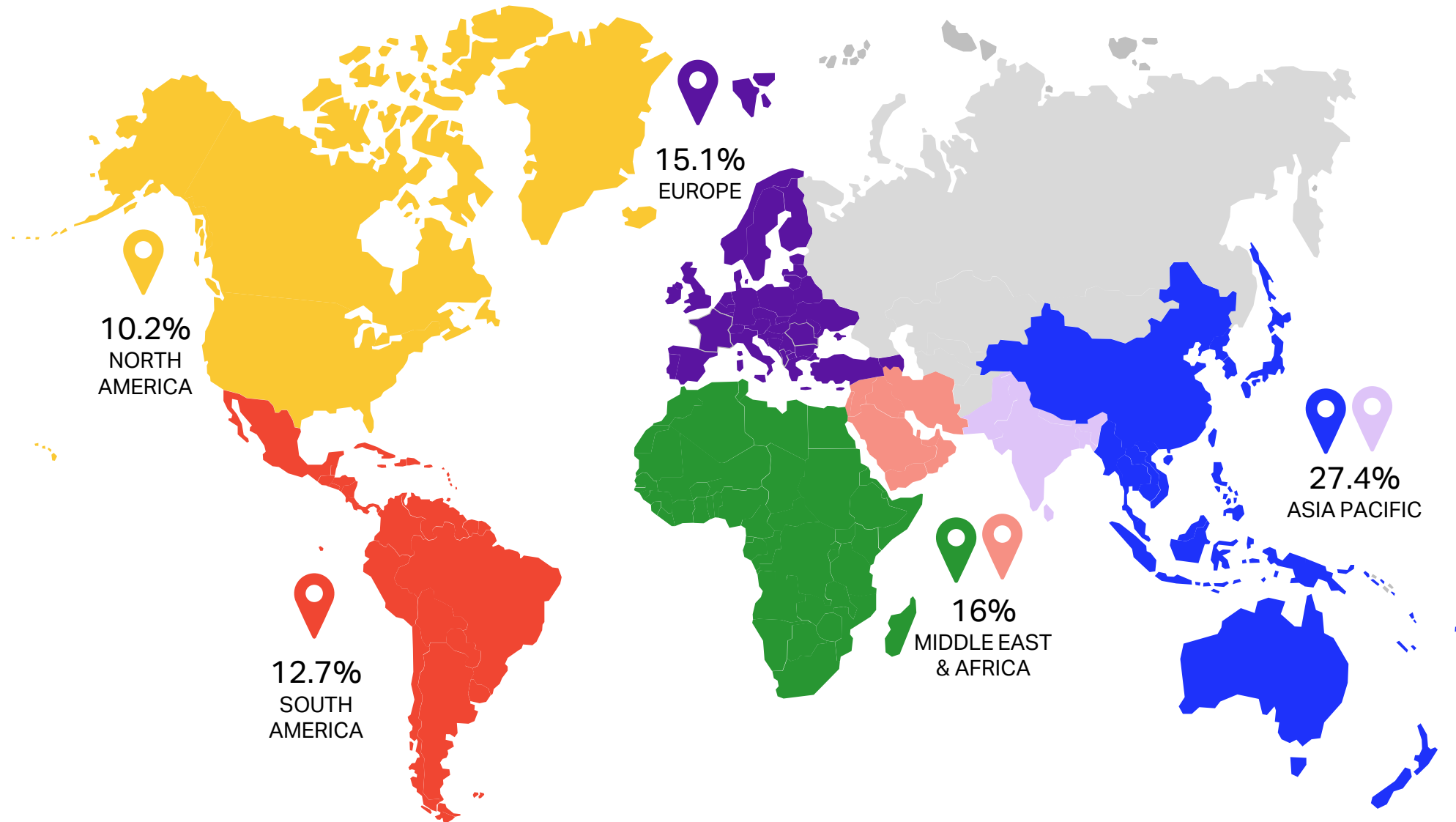
5 years ahead

Latin America

2 years ahead

China

eCommerce Return To Normal Growth - 2022



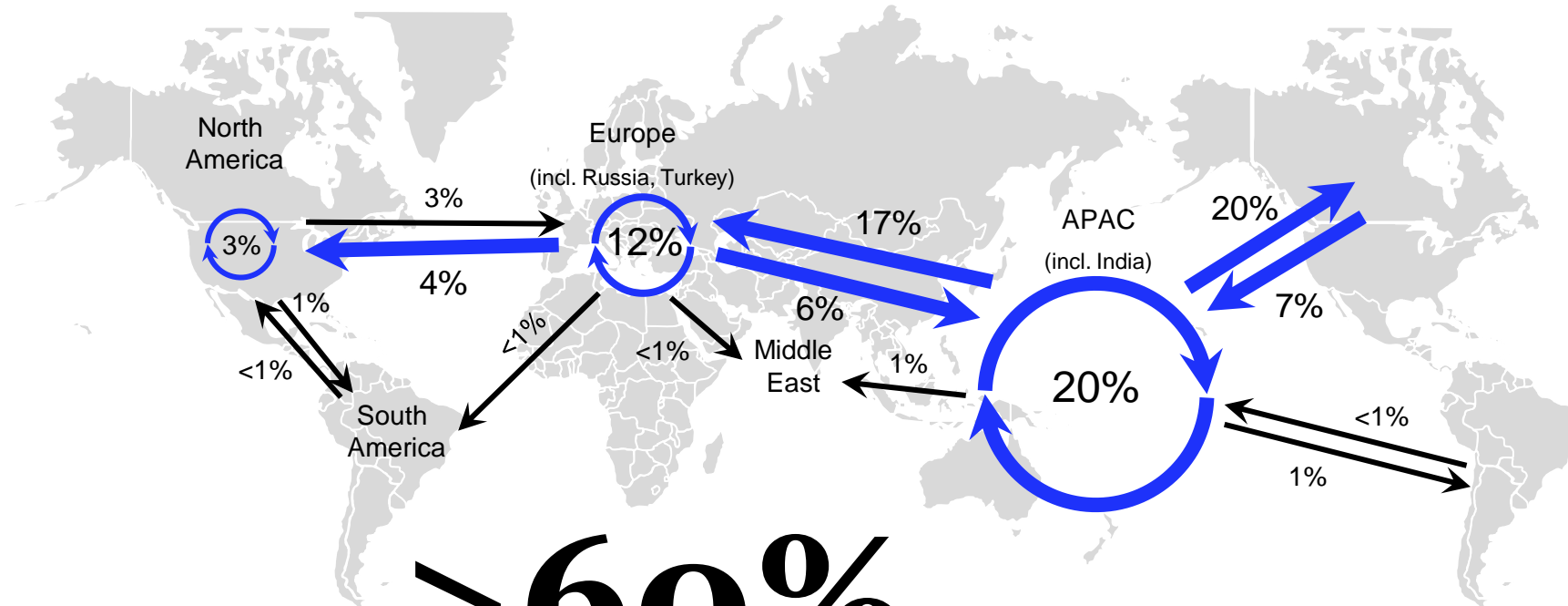
XB e-commerce: ~11 bn purchases in 2021

2021 volume, percent

Estimates

~**11** bn orders annually¹

% → Percent of total trade → Trade lanes ↻ Intra-regional

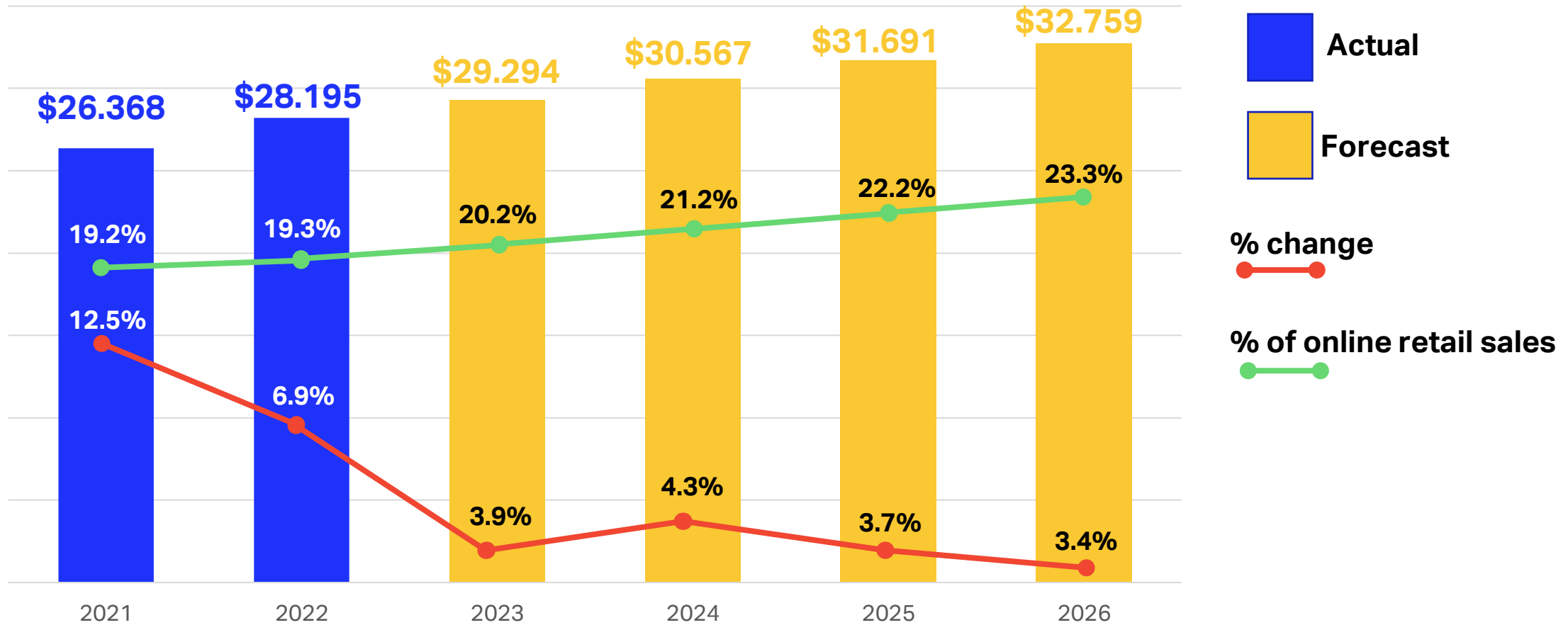


> 60% of all cross-border e-commerce orders are inter-continental

1. Online orders regardless of fulfillment and shipping method (i.e., including consolidated / bulk shipment, forward located inventory, express, postal and other single cross-border parcels); volumes that cannot be accounted for trade lane are not included on slide

Worldwide retail sales – Growth Slowing Down

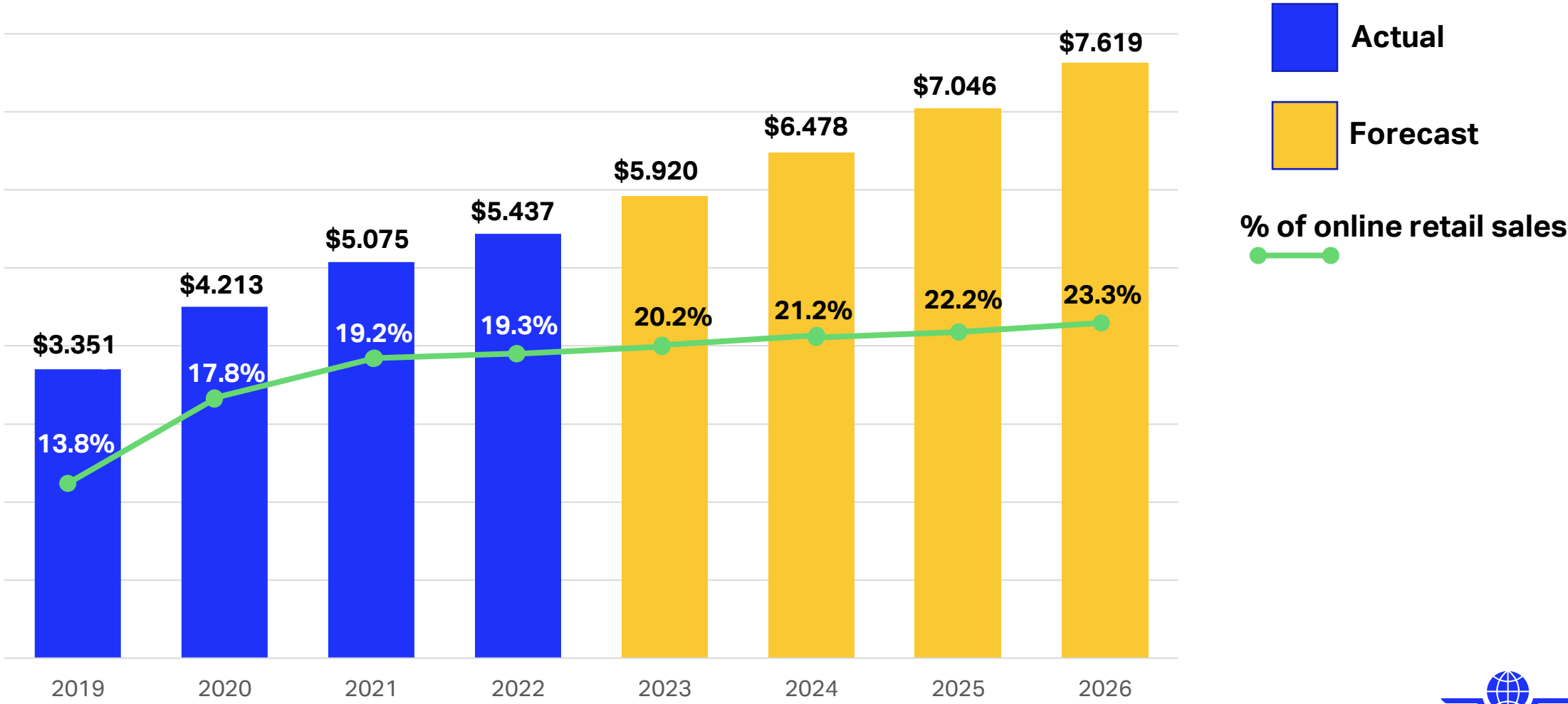
2022 (Trillion USD)



And % of online retail sales

Worldwide eCommerce Retail Sales – Still Growing

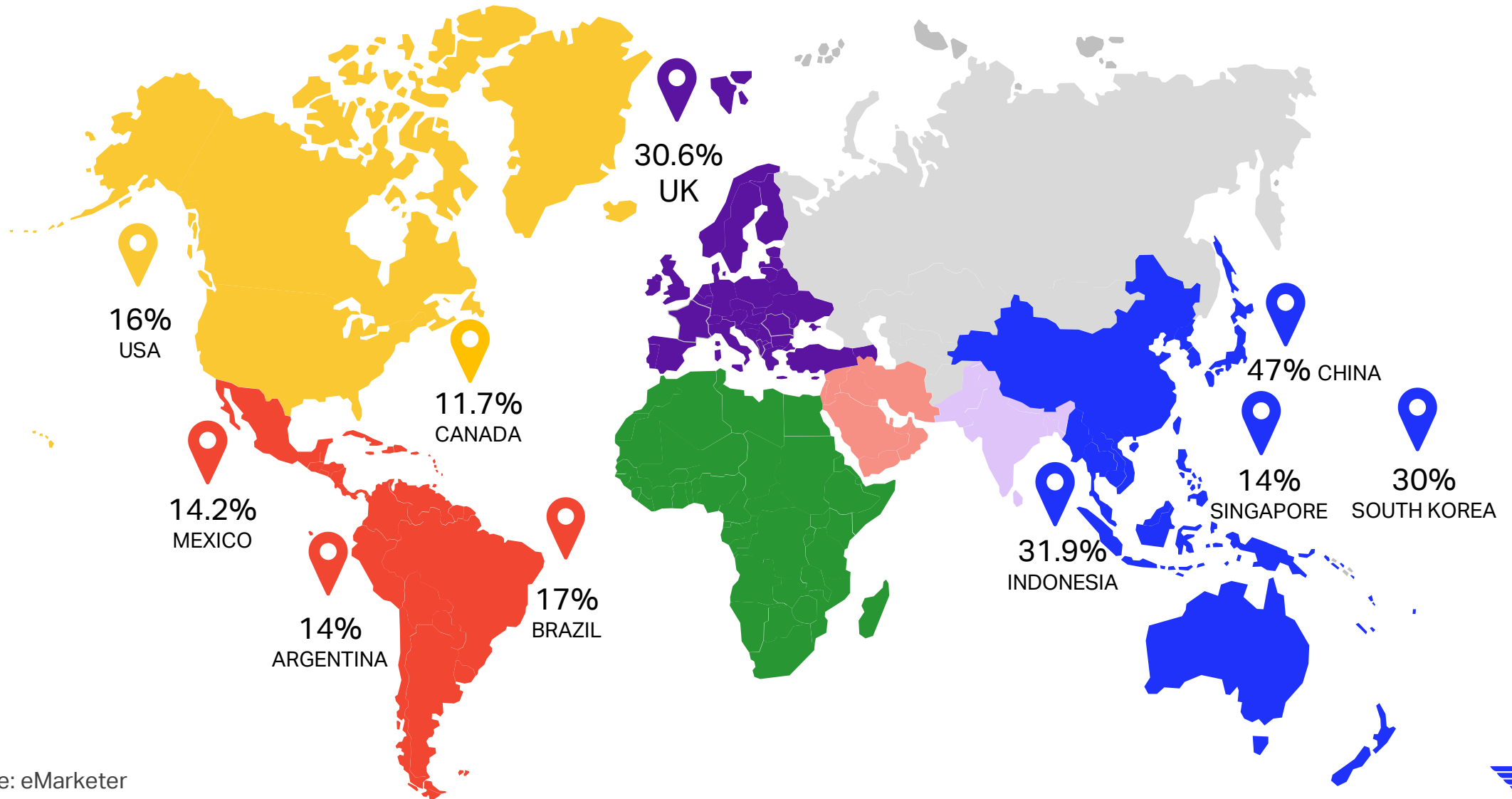
2019-2026 (Trillion USD)



Source: eMarketer



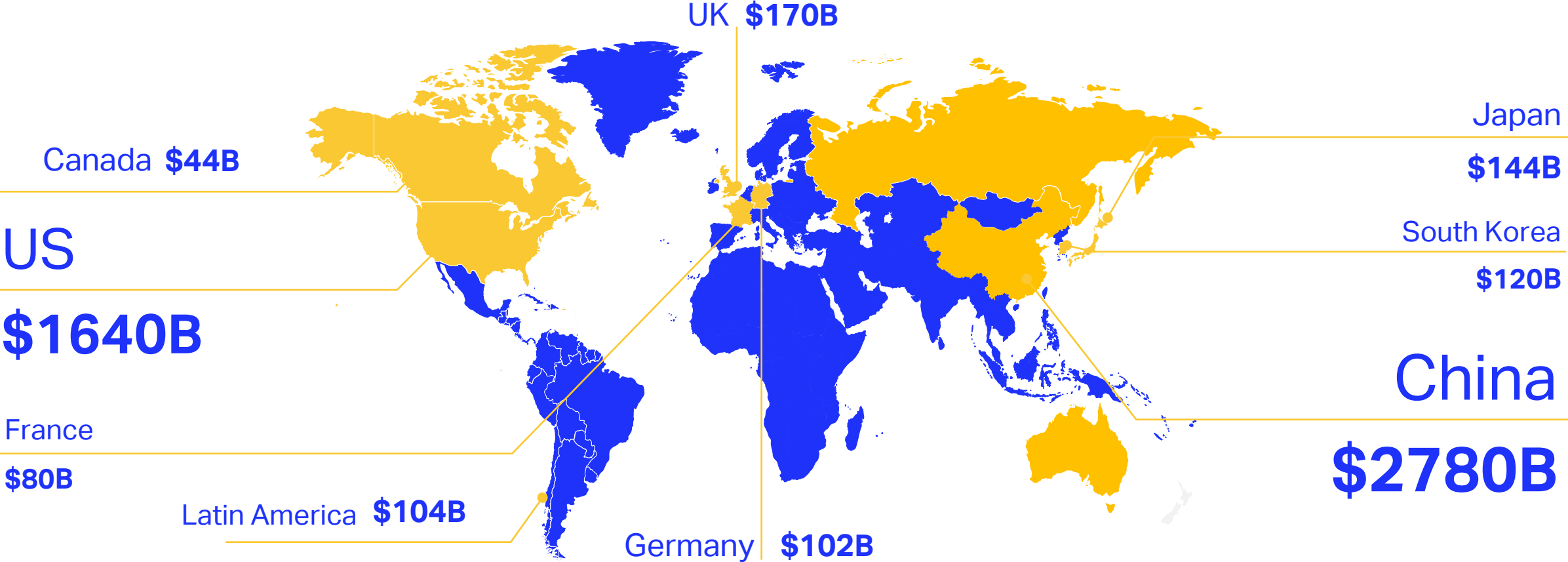
Snapshot - % Online Retail Sales - 2022



Source: eMarketer



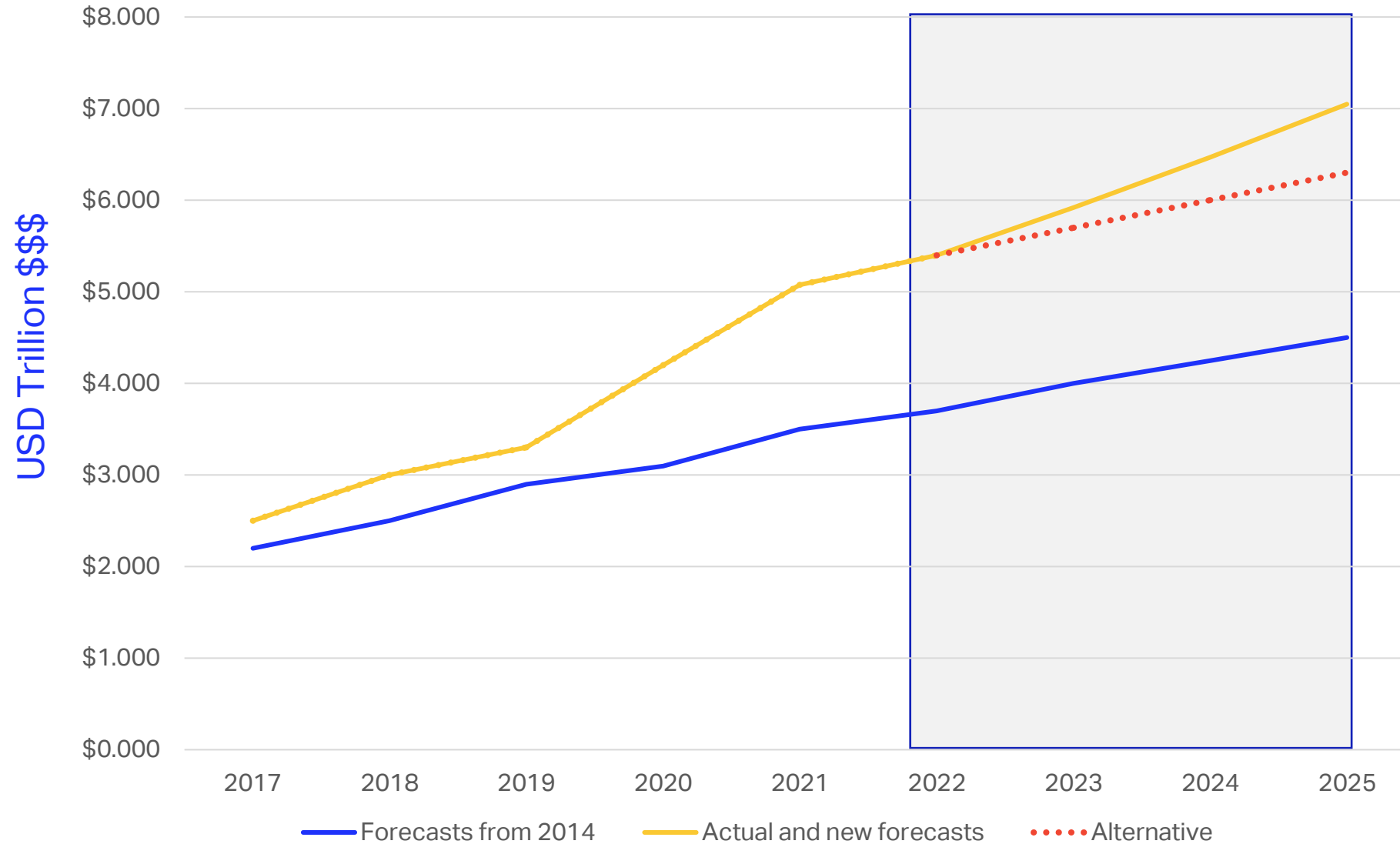
E-Commerce After The Pandemic - 2022



Source: Statista/DHL
* Figures including services



But forecasts always underestimated e-Commerce



eCommerce Logistics – Massive investments

The global eCommerce logistics market was valued at:

- USD 235.70 billion in 2020
- USD 315.82 billion in 2022

Expected to grow at an annual growth rate (CAGR)
of 22.3% from 2023 to 2030

- USD 1,901.97 billion in 2030

eCommerce logistics involves the provision of services such as warehousing, transportation, value-added services, and packaging.

The eCommerce Tsunami of Parcels

Volumes of parcels shipped:

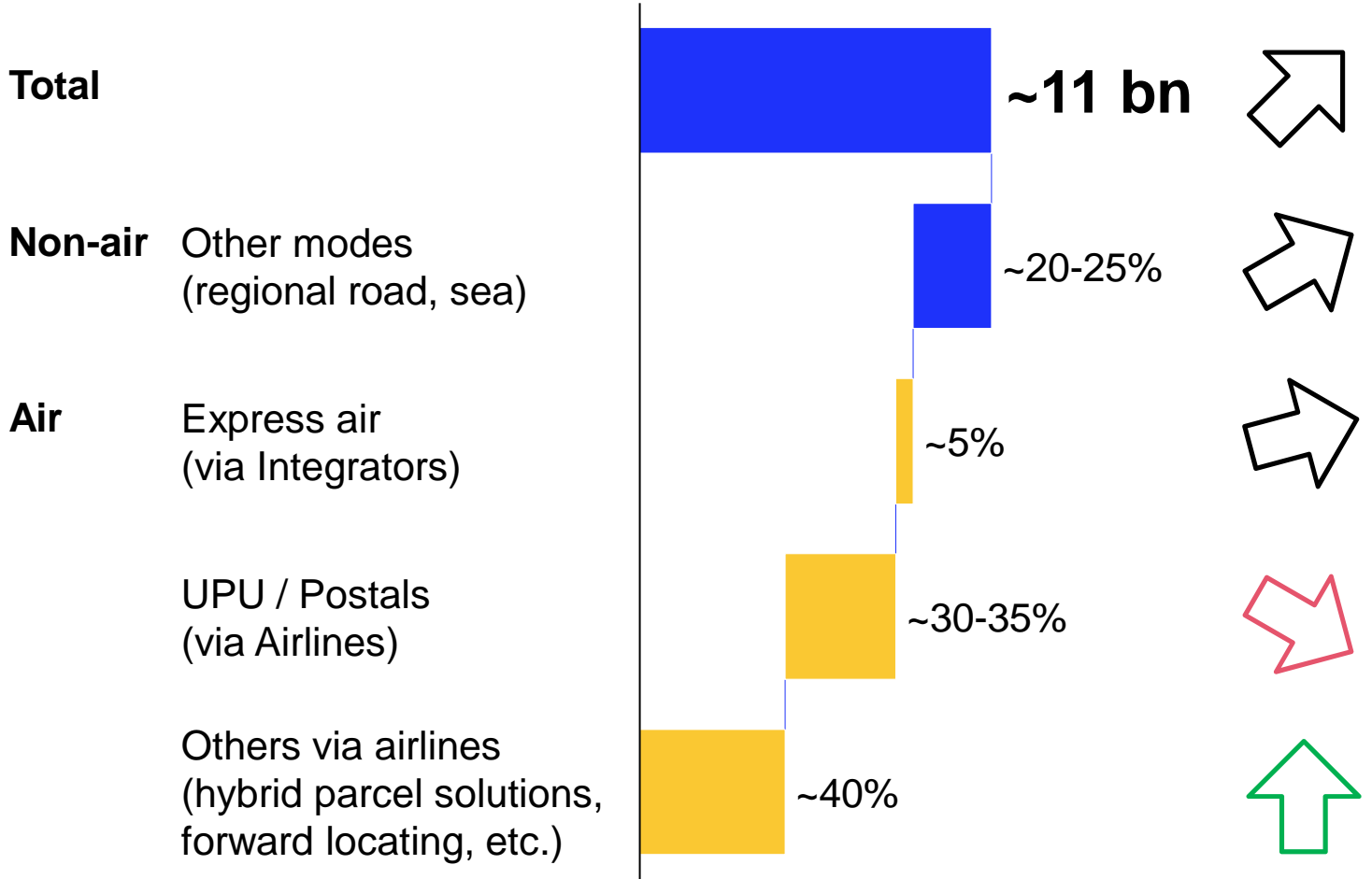
- 2022 - 170 billion parcels
4x more than 2014
- 2027 – 256 billion parcels
+50% compared to 2022





Cross-border B2C order volume, 2021

Future growth



For air cargo, e-commerce accounts for ~20% of total cargo volumes and the share could grow to 30% by 2027

Source: McKinsey
1 Preliminary estimates

E-Commerce share of global air cargo volume (%)

2017

2022¹

2027^e

10%

20%

30%



Assuming 10-15% annual growth of cross-border e-commerce vs. 3-4% for general air cargo

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

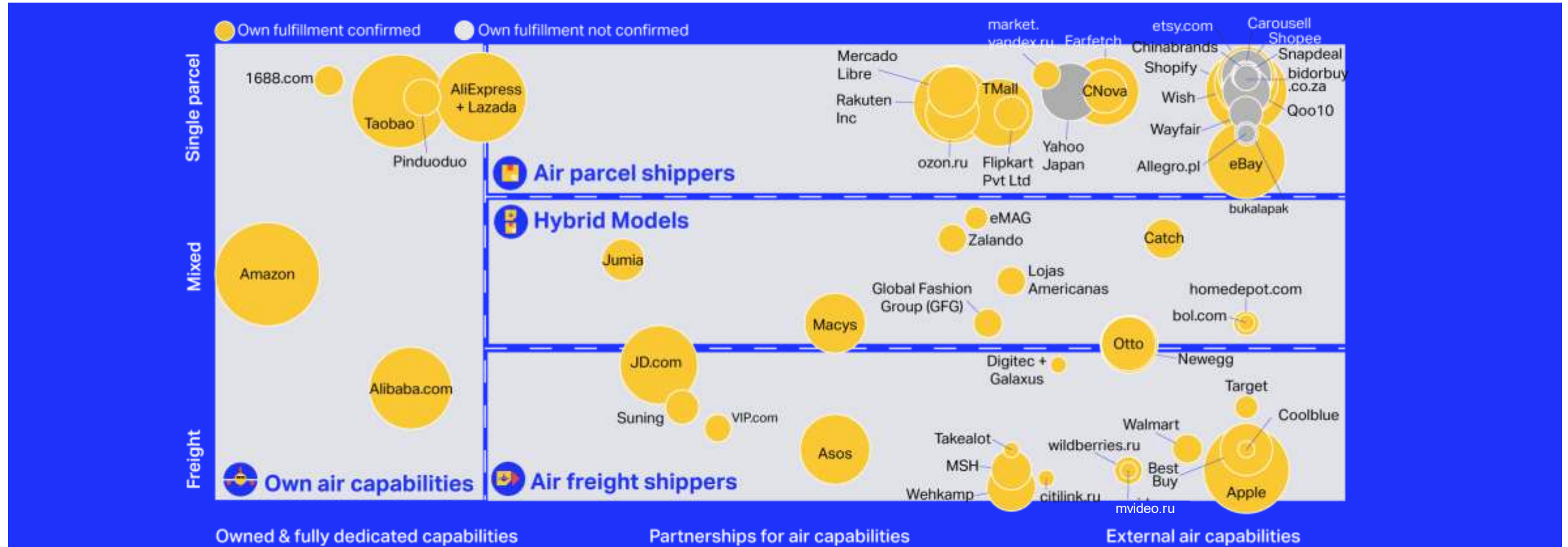
Companies move the goods to fulfillment centers in freight format and perform local ground distribution in the destination country

Hybrid model

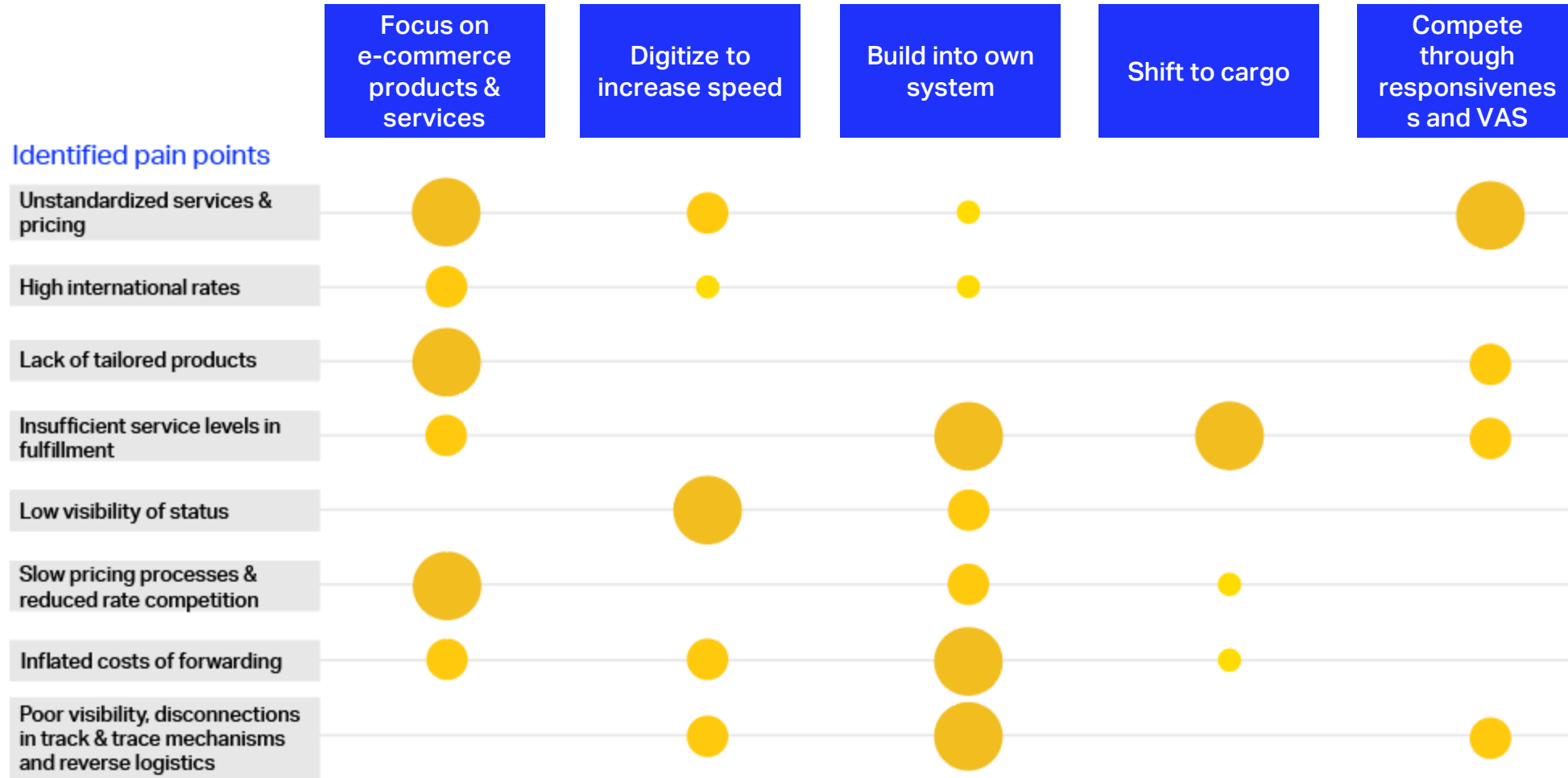
Mixed-use of internal and external capabilities to move freight to fulfillment centers, and also shipping of single parcels to consumers via air cargo

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%

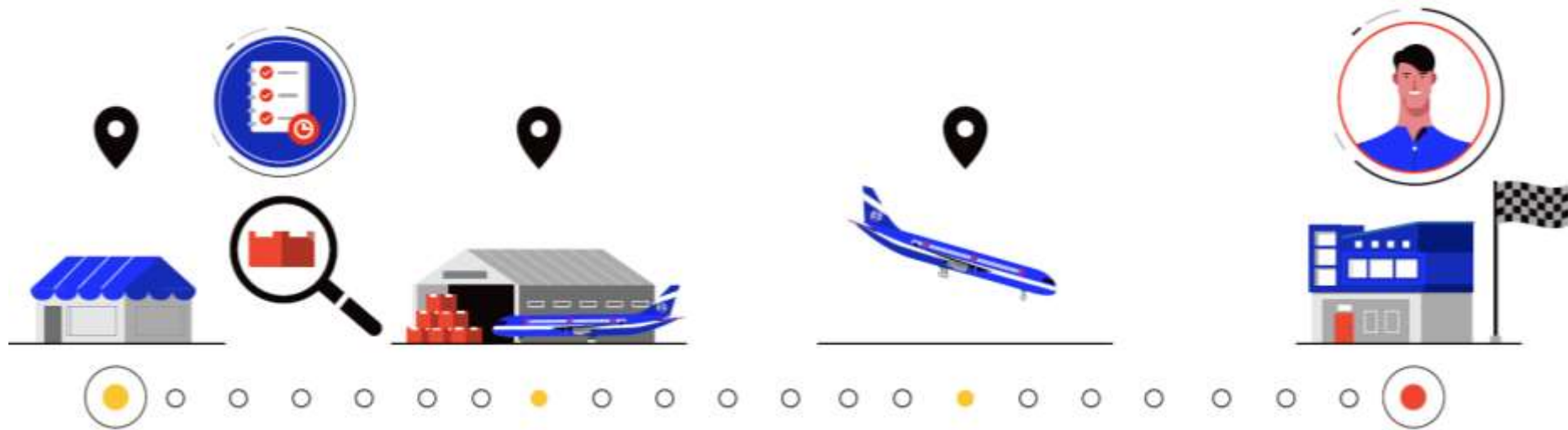
air cargo airline revenue in 2020

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.

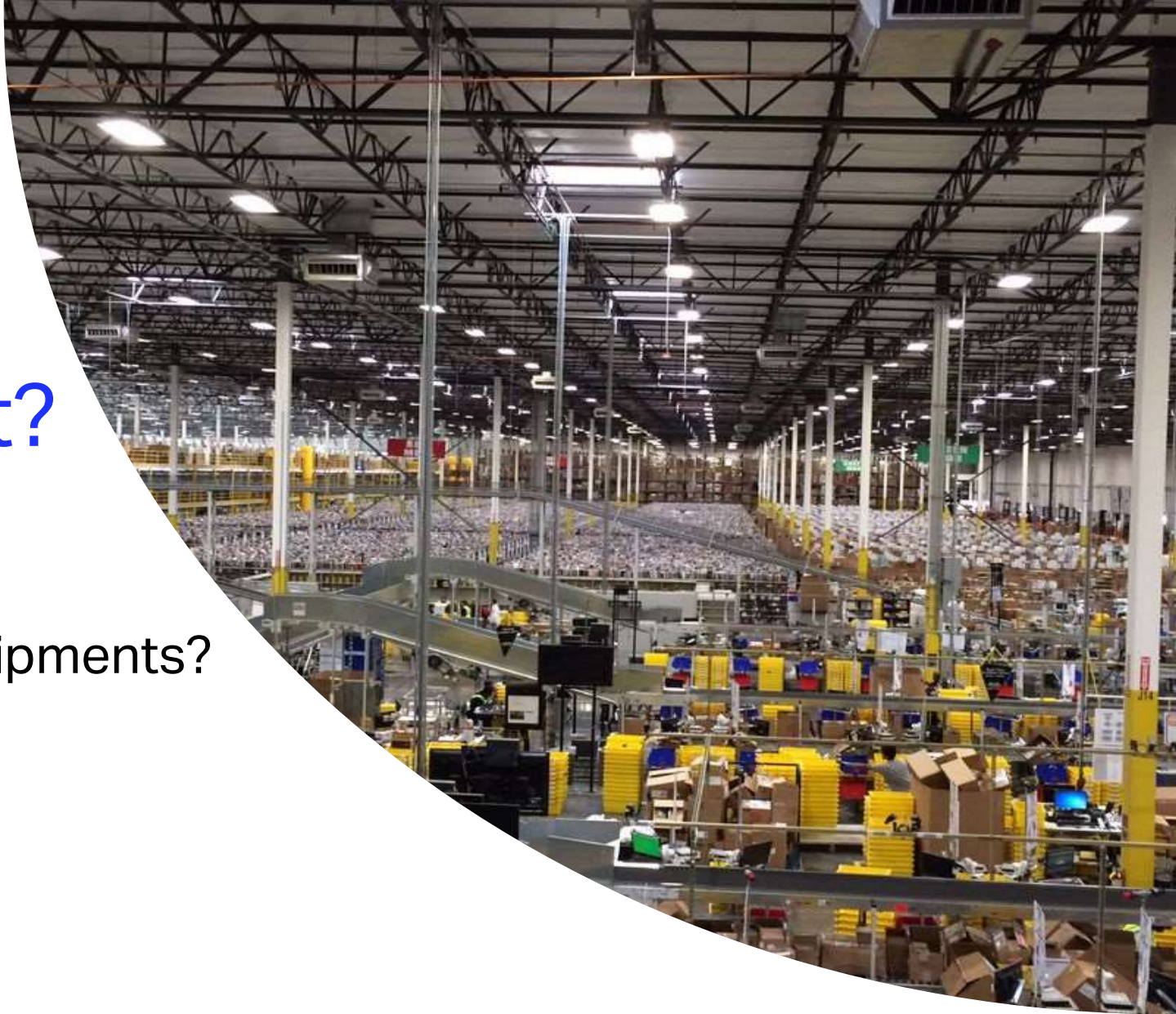
e-commerce is key for industry prosperity/survival

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

What are the opportunities?

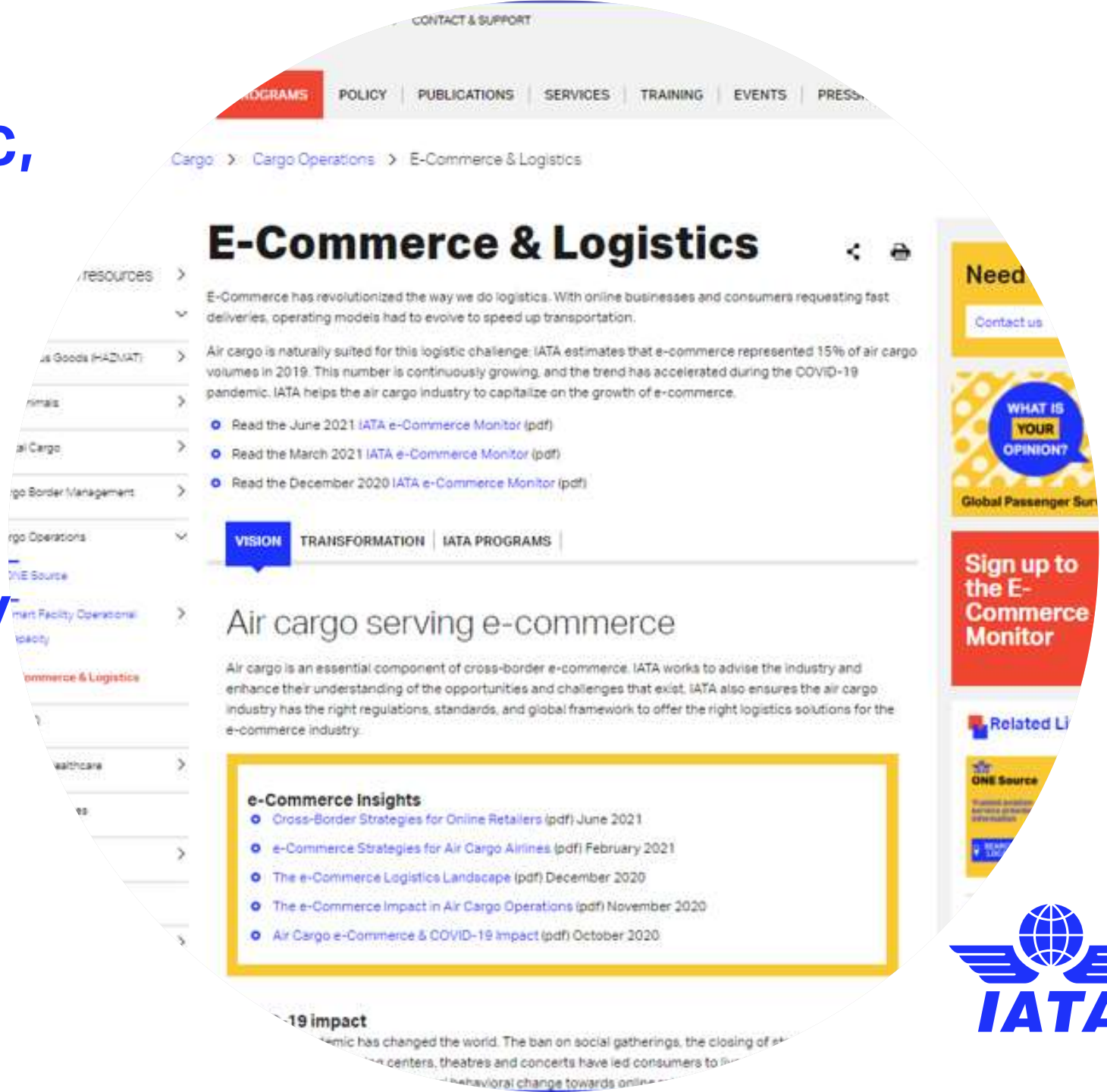
How to capitalize on it?

- What is eCommerce?
How would you identify those shipments?
- Do we need to know?
Or is it only cargo & mail?
- What would be the benefits?



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

Now air cargo is key
to e-Commerce

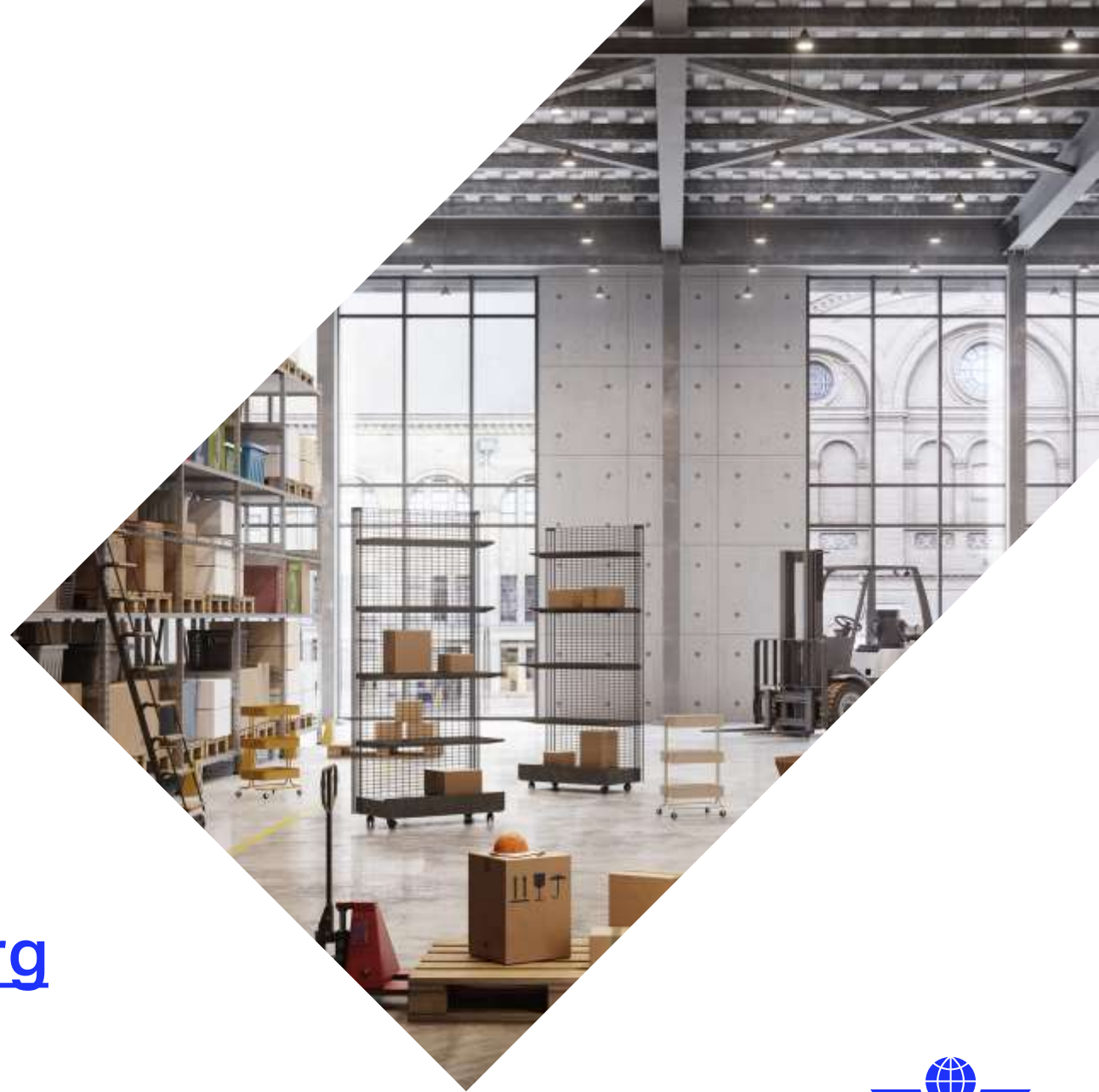


Thank you!

Andre Majeres

**Head of eCommerce, Cargo and
Mail Operations**

majeres@iata.org | www.iata.org



Cargo Safety – Lithium Batteries



Bheki Ngiba

Manager Dangerous Goods, SACAA



DANGEROUS GOODS

Lithium Battery Risk

Bheki Ngiba





01 Revised Regulations

Applications and submissions

02 Cargo Entities Compliance

Summary

03 5 Phase Process

Approval Process

04 Lithium Battery risk

05 New developments

Revised Part 92 regulations overview

Annex 18 and Technical instructions alignment

Aligning Part 92 and Annex 18 headings for ease of reference – linking the regulations to the actual standards.

Address regulatory gaps identified through gap analysis

dangerous goods requirements for entities other than the operators.

Annex 6, Part I, chapter 14 and 15

Annex 6, Part III Requirements for Helicopters, and

Annex 19- Risk assessment requirements.

Requirements for approval for operators to carry Dangerous goods

Addition of clear requirements and process for operators wishing to apply for approval to carry Dangerous Goods as cargo.

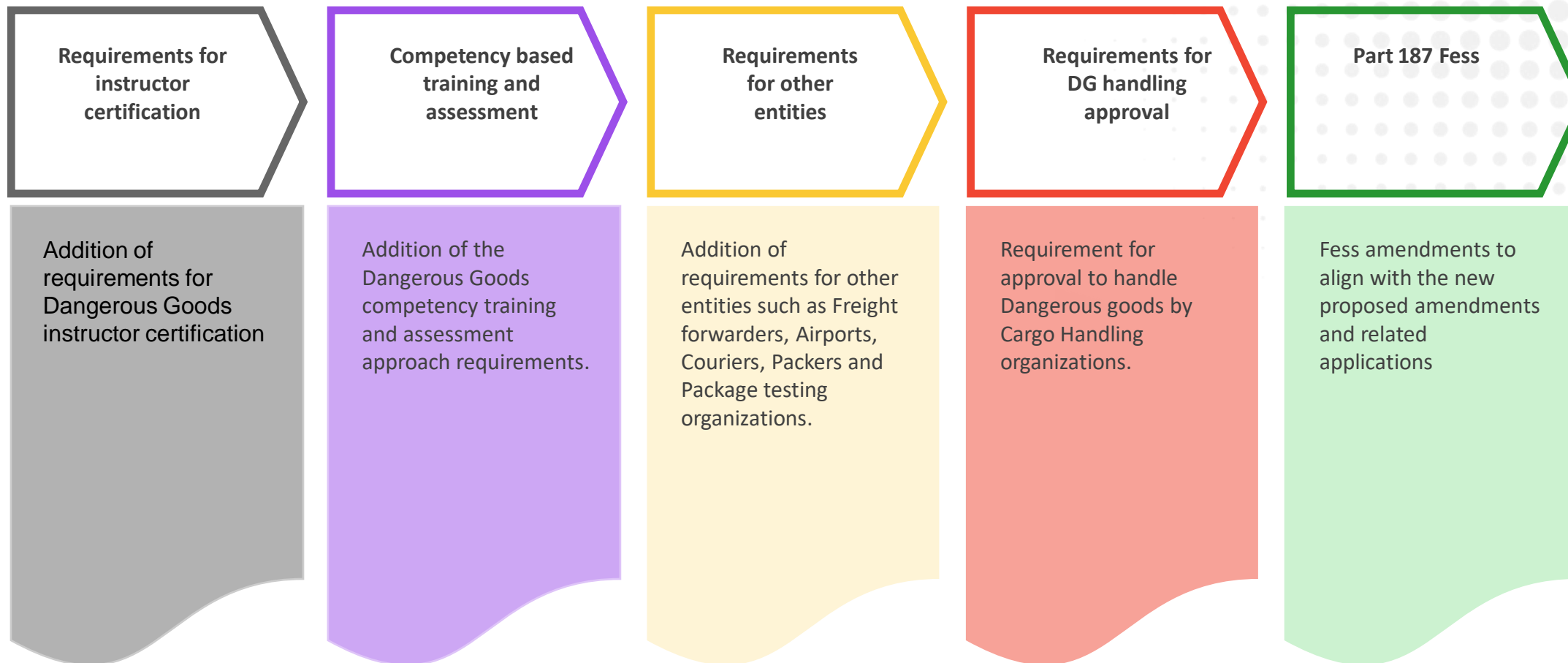
Requirements for operators not approved to carry dangerous goods

Addition of clear requirements for operators that are not approved to carry dangerous goods as cargo

Requirements for Aviation Training Organizations' Training Dangerous Goods

Addition of requirements and process for ATOs to train Dangerous Goods -in line with Part 141 approval regulations.

Revised Part 92 regulations overview



Cargo and other entities compliance summary

01 All Entities with no approval

Any cargo handling entities in the supply chain including Aerodromes



- ✓ Submit an MOP for approval
- ✓ MOP must contain CBTA program
- ✓ Ensure declaration for non-dg cargo is given to the handling agent or operator
- ✓ Does not handle dangerous goods
- ✓ Hand dangerous goods cargo to approved agent for final acceptance
- ✓ Reject or rescreening in the absence of declaration
- ✓ Report incidents

02 Entities requiring approval

Any entities doing final acceptance of cargo/ dangerous goods before it is loaded onto an aircraft

- ✓ Application for Certification
- ✓ Submit MOP with CBTA program
- ✓ Five Phase Process will apply
- ✓ Will be added on the CAA list
- ✓ Ensure declaration for non-DG cargo is given to the operator
- ✓ Keeps all DG Documentation
- ✓ Reject or rescreening in the absence of declaration
- ✓ Report incidents

Cargo and other entities compliance summary

03 Operators- NO DG approved

Non- DG approved



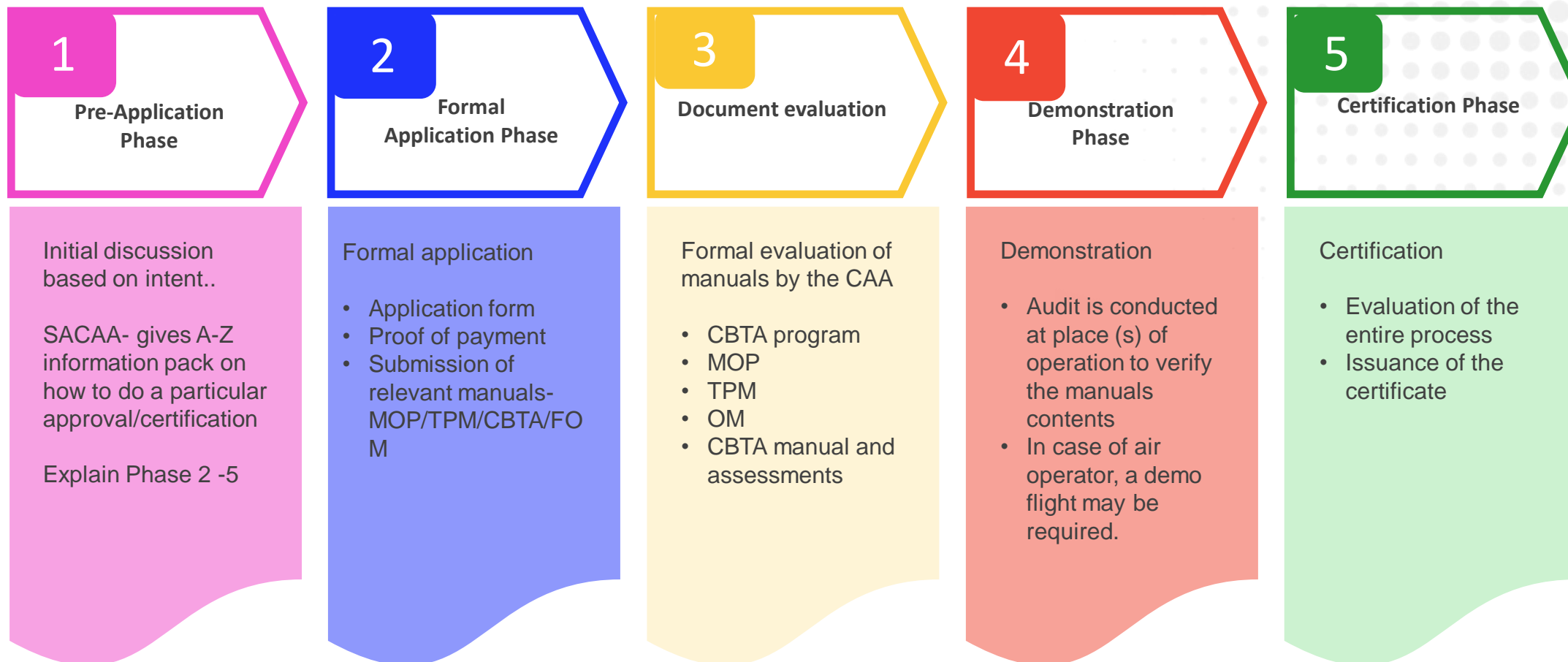
- ✓ Application for CBTA approval
- ✓ OM DG Section containing CBTA program
- ✓ CBTA Manual and assessments
- ✓ Does not handle dangerous goods
- ✓ Hand COMAT dangerous goods cargo to approved agent for final acceptance
- ✓ Reject or rescreening in the absence of declaration
- ✓ Report incidents

04 DG approved Operators

Any entities doing final acceptance of cargo/ dangerous goods before it is loaded onto an aircraft

- ✓ Application for Certification and for CBTA
- ✓ Submit OM DG Section with CBTA program
- ✓ CBTA Manual and assessments
- ✓ Five Phase Process will apply
- ✓ Will be added on the CAA list
- ✓ Ensure declaration for non-DG cargo is given to the operator
- ✓ Keeps all DG Documentation for DG shipments
- ✓ Reject or rescreening in the absence of declaration
- ✓ Report incidents

5 Phase process



Lithium Battery Risks

Lithium Battery :

- US Federal Aviation Administration data from May 2023 showed there had been at least one lithium battery incident on a passenger plane each week since 2021, an increase of 42 per cent increase since 2018.

Lithium batteries

Lithium cells and batteries are **Class 9 (miscellaneous) Dangerous Goods**.

- Stand-alone—Package contains only the cells/batteries—no equipment:
- **UN3090, Lithium metal batteries** including lithium alloy batteries
- **UN3480, Lithium ion batteries** including lithium ion polymer batteries
- Packed with—Package contains not only the equipment, but also cells/batteries that are not installed in the equip
- **UN3091, Lithium metal batteries** packed with equipment including lithium alloy batteries
- **UN3481, Lithium- ion batteries** packed with equipment including lithium ion polymer batteries
- Contained in—Package contains equipment with cells/batteries installed:
- **UN3091, Lithium metal batteries** contained in equipment including lithium alloy batteries
- **UN3481, Lithium ion batteries** contained in equipment including lithium ion polymer batteries
- Vehicles—Package or shipment contains a vehicle powered by lithium batteries:
- **UN3171, Battery-powered vehicle**
- Cargo Transport Unit—Lithium batteries installed in a cargo transport unit and designed only to provide the cargo transport unit.
- **UN3536, Lithium batteries** installed in cargo transport unit lithium ion batteries or lithium metal batteries



What are the risks associated with Lithium batteries ?

Lithium cells and batteries can become dangerous and cause fires, and electrical shocks if not safely packaged and handled when transported.

Lithium battery risk maybe increased when batteries have been:

- Misused,
- mishandled,
- modified,
- improperly packaged,
- improperly stored,
- overcharged,
- damaged,
- And when they are defective

Lithium cells or batteries can short circuit, overheat, and sometimes cause fire. The heat from a single cell in thermal runaway can propagate from cell to cell and package to package until the entire shipment has been consumed. Temperatures experienced involving lithium cells or batteries in thermal runaway are sufficient to ignite typical fibreboard packaging and nearby materials.



Lithium battery risk



Images of shipments on fire at Hong Kong Airport have circulated on *What's App*. The freight included a batch of China-manufactured Vivo smartphones and accessories due to be shipped to Bangkok – reportedly the Y20 model. The phones were loaded across three pallets, all of which caught fire, and it reportedly took the emergency services some 40 minutes to put out the blaze. Sources told local media that, while the airport's operations were not affected, a 24 by 12 metre space on the tarmac was damaged.

13 April 2021

Mitigating the risk

- Batteries must be of a type which meets the requirements of the UN manual of Tests and Criteria, Part III, subsection 38.3
- Check packing instructions and the related special approval carefully
- Check Table 2.3.A of the IATA DGR or Table 8-1 of the ICAO Technical Instructions for items related to provisions for passengers and crew



Other lithium battery operated devices

01

Data Loggers and transmitting and receiving devices

Portable electronic devices (PEDs) such as dataloggers and cargo tracking devices, that are designed to remain active throughout their transport from shipper to consignee, have a potential to interfere with aircraft navigation or communication systems. The operator must determine which ones will not interfere with the safe operations of the aeroplane.



02

Use of smart bags (0.3g metal or 2.7 Wh)

Recent developments of innovative baggage with integrated lithium batteries, commonly known as “smart luggage” are being marketed and sold to the traveling public. These devices include integrated lithium batteries, motors, power banks, GPS, GSM, Bluetooth, RFID or Wi-Fi technology. The presence of the lithium batteries can contravene various regulatory requirements. These devices require careful attention – even if permitted by the applicable regulations.

“smart” luggage features may include items such as:

- Lithium ion battery and motor allowing it to be used as a personal transportation device, either as a stand-up scooter, or sit on vehicle. These devices do not meet the criteria of a mobility device.
- Lithium ion battery power bank that allows charging of other electronic devices such as mobile phones, tablets and laptops.
- GPS tracking devices with or without GSM capability.
- Bluetooth, RFID and Wi-Fi capability.
- Electronic baggage tags.
- Electronic lock/s.
- Lithium ion battery, motor and tracking device (GPS) allowing the bag to self-propel and ‘follow’ the owner.

03

Self-balancing scooters and Hoverboards

Most airlines enforce a stringent ban of all hoverboards due to the risk of fire and explosion.

UN 3171 **Battery powered vehicles**, or UN3481 **Lithium ion batteries contained in equipment.**



New developments from the Dangerous Goods panel

01

- .UN3556 –Vehicle, Lithium Ion Powered PI 952
- .Includes hoverboards and self-balancing wheels
- .Hybrid vehicle PI 950 and 951

Proposal to have the battery state of charge reduced to 30 to 35 percent

02

- Exceptions for data loggers and cargo tracking devices

The exceptions will be added under Part 1; 1.1.5.1 of the Technical Instructions for usage of data loggers and cargo tracking devices

03

- 30 percent State of charge extended UN3481 and UN3171

Proposal to extend 30 percent state of charge is to UN3481 – lithium batteries packed with equipment and
UN3481 – Lithium batteries contained in equipment
UN3171- battery powered equipment
UN3171- Battery powered vehicle

New developments from the Dangerous Goods panel

04

Solid state lithium batteries

Data share with the DGP- WG suggested that there was no risk of propagation associated with solid state lithium batteries making them a better alternative to traditional Lithium battery technology

05

Packing instructions for sodium ion batteries

DGP-WG/UN Harmonization provided two options for DGP-WG/23 to consider:

- a) merging the provisions for sodium ion with the provisions for lithium ion batteries in Packing Instructions 965, 966, 967; or
- b) one new standalone packing instruction for sodium ion batteries that contained separate sections for sodium ion batteries packed on their own, packed with equipment, and contained in equipment.

06

Report Dangerous Goods incidents on

AVSECIncidents@caa.co.za and Dangerousgoodsoperations@caa.co.za



Contact us on:

Dangerousgoodsoperations@caa.co.za

ULD Safety Campaign and the IATA GADM



Andre Majeres

Head of eCommerce and Cargo Operations, IATA

What is Aircraft ULD?



Aircraft ULD

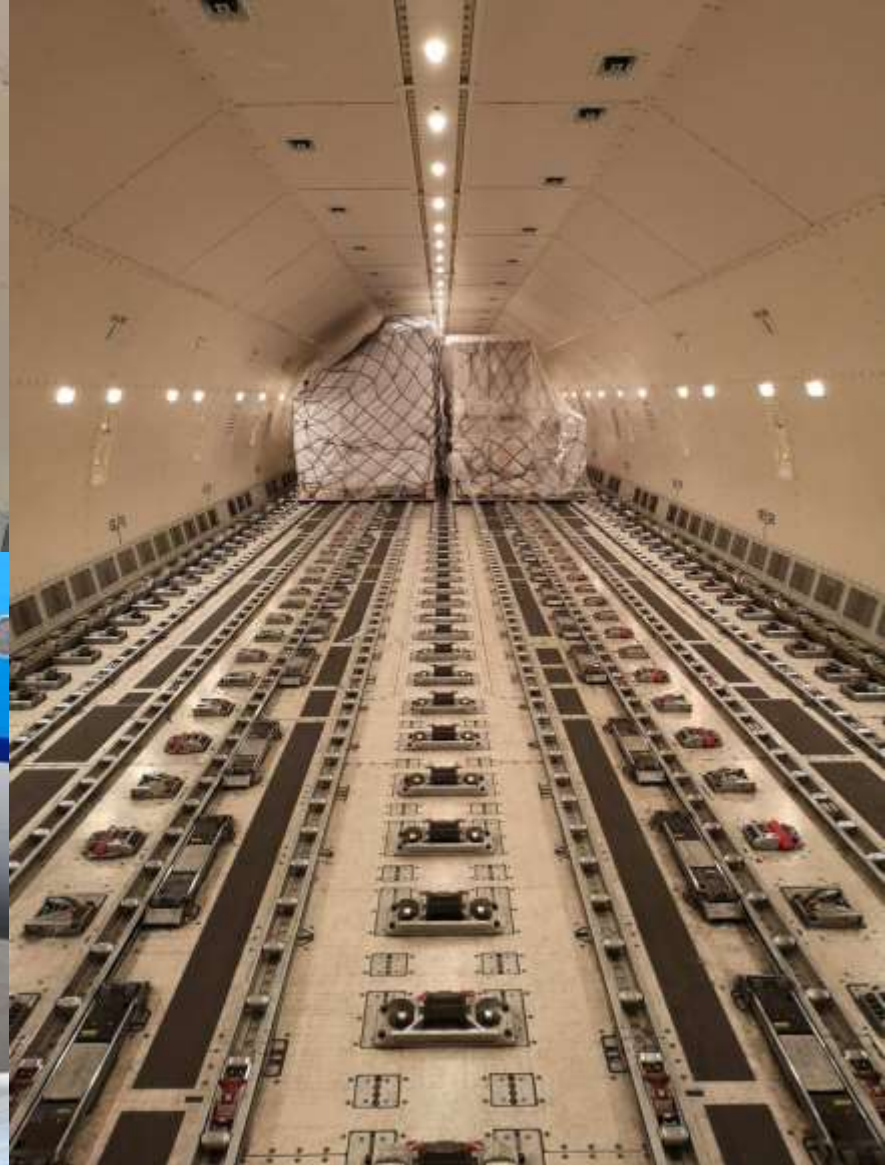
Definition *(see IATA ULD Regulations)*

Aircraft Unit Load Device (ULD) is a device for grouping and restraining cargo, mail and baggage for air transport. It is either an aircraft container or a combination of an aircraft pallet and an aircraft pallet net. Aircraft ULD is designed to be directly restrained by the aircraft Cargo Loading System (CLS).

Aircraft Container



Aircraft Pallet + Aircraft Pallet Net



National Regulations and Advisory Material Applicable to ULDs

State/Authority	China Civil Aviation Administration of China (CAAC)	Europe European Aviation Safety Agency (EASA)	Japan Civil Aviation Bureau (JCAB)	U.S.A. Federal Aviation Administration (FAA)
Area concerned				
Equipment approval requirements	CCAR-21 <i>Certification Procedures for Products and Parts</i> CTSO	EASA Part 21 <i>Certification of aircraft and related products, parts and appliances</i> CS-ETSO	—	14 CFR Part 21 <i>Certification Procedures for Products and Parts</i>
ULD design/tests and certification	CTSO C90 <i>Cargo pallets, nets and containers</i>	ETSO C90 <i>Cargo pallets, nets and containers</i>	JTSO C90 <i>Cargo pallets, nets and containers</i>	TSO C90 <i>Cargo pallets, nets and containers</i>
Aircraft airworthiness certification	CCAR-25 <i>Airworthiness Standards Transport Category Airplanes</i>	EASA CS-25 <i>Certification Specifications for Large Aeroplanes</i>	Airworthiness Standard Part 3 <i>Civil Aeronautics Act Art. 10</i>	14 CFR Part 25 <i>Airworthiness Standards: Transport Category Airplanes</i>
Carrier certification and operations	CCAR-121 <i>Air Carriers Certification and Operations</i>	EU-OPS 1 <i>Commercial Air Transportation (Aeroplanes)</i> OPS 1.035, 1.037 & AMC <i>Quality System Safety Management System</i>	Civil Aeronautics Act & Ordinance for Enforcement Chapter VI, <i>Operation of Aircraft</i> and VII, <i>Air Transport Services</i> and application Circulars No. 4 and 5	14 CFR Part 121 <i>Air Carriers Certification and Operations</i> 14 CFR Part 5 <i>Safety Management System</i> AC 120-59A <i>Air Carrier Internal Evaluation Programs</i>
Service providers safety system	—	EU Reg. 376/2014 Reporting, analysis and follow-up of occurrences	—	AC 120-92B <i>Safety Management System for Aviation Service Providers</i>
Operations, cargo	—	—	—	AC 120-85B <i>Carriage of Cargo</i>
Maintenance of approved equipment	CCAR-43 <i>General Rules for Maintenance</i> CCAR-145 <i>Maintenance Organization Certification</i>	EASA Part M <i>Continuing Airworthiness Rqts</i> EASA Part 145 <i>Maintenance Organisation Approval</i>	Civil Aeronautics Act & Ordinance for Enforcement Art. 20, <i>Approval of Organizations</i> and application Circular No. 2-001	14 CFR Part 43 <i>Maintenance</i> 14 CFR Part 145 <i>Repair Stations Certification</i>

Regulatory Framework Applicable to Aircraft ULD

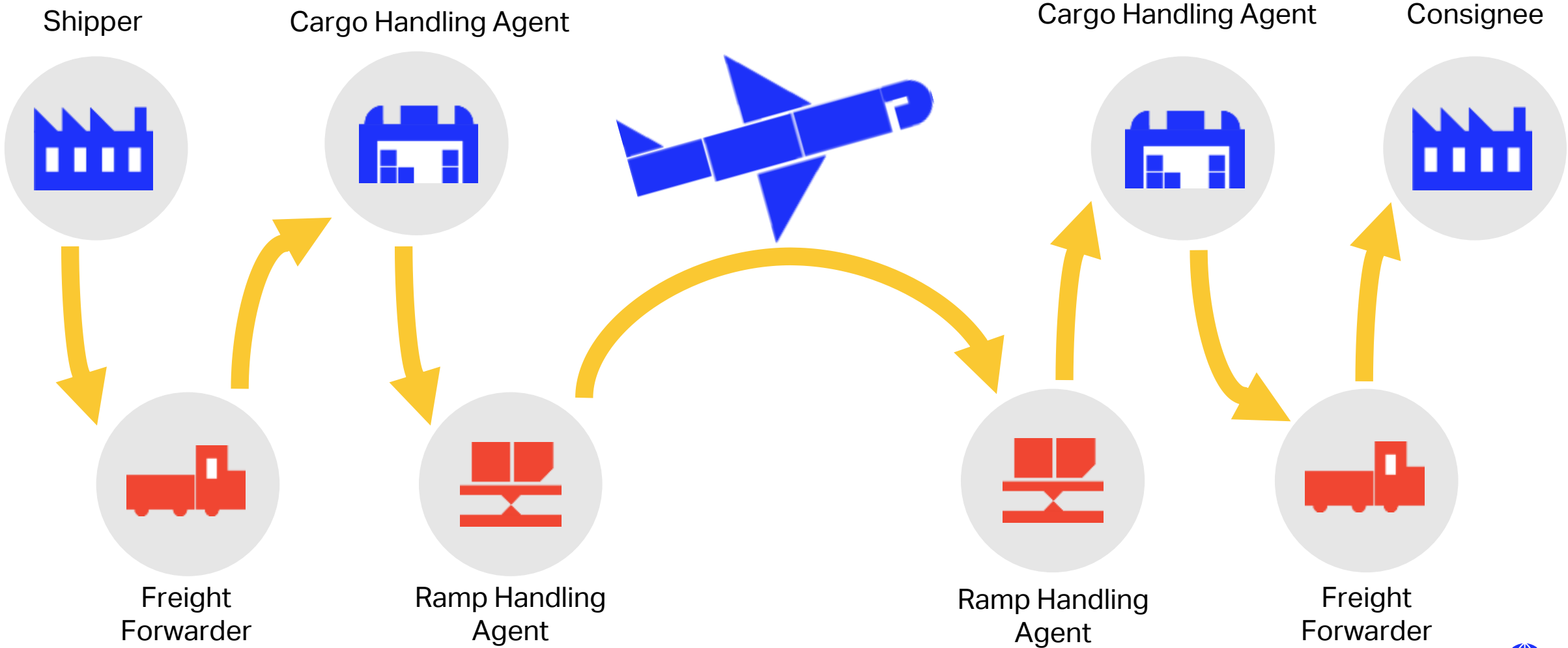


Whose Responsibility?

Where does compliance with regulations start in the carriage of cargo?



ULD Operations across Air Cargo Supply Chain





FAA jurisdiction starts at the airplane threshold *

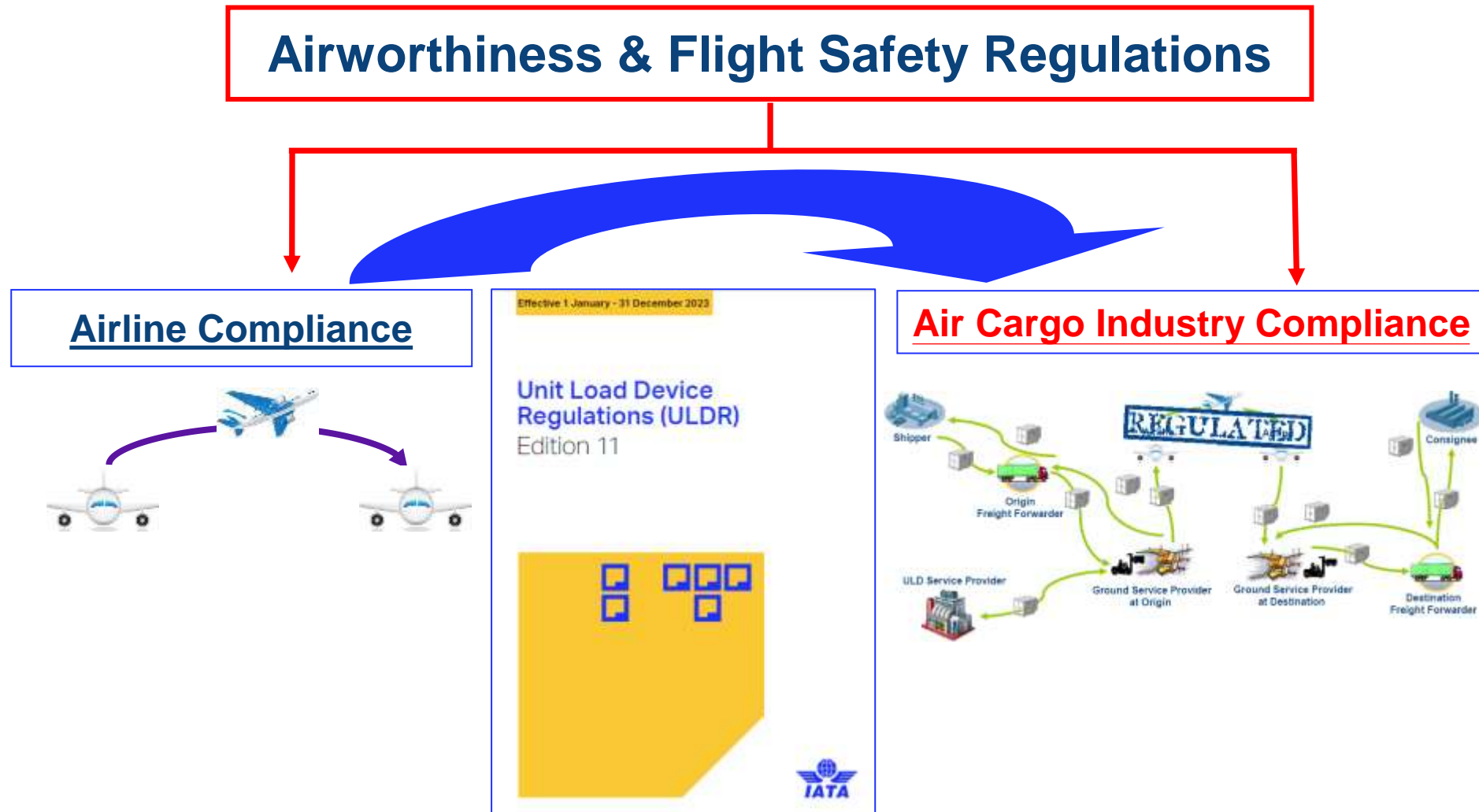
- **The AIRLINE is always responsible** for all cargo carried on its aircraft. Including all aspects that have occurred outside of the airplane such as accurate weights, ULD build-up, ULD serviceability check, etc.
- The moment the airline is accountable is when the cargo crosses the threshold



It doesn't matter to the FAA who builds the pallet, the **AIRLINE** becomes responsible for this build-up once it is loaded on the airplane.

ULD Regulations – Industry’s Solution

“one means of compliance containing a single set of regulations for all parties involved conforming to all legally applicable and industry agreed regulations”



What have been achieved?

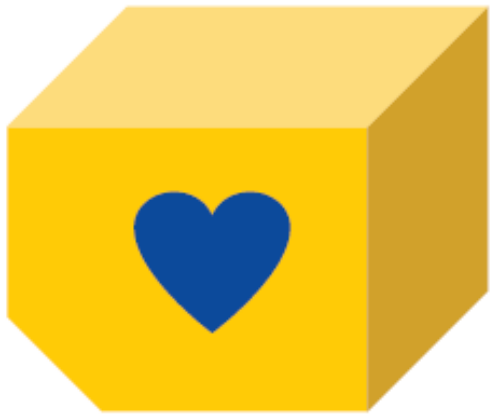
The industry continues to promote the ULD Safety Campaign after its launch

- 1200+ stakeholders downloaded the [artwork package](#)
- 50+ organizations requested for co-branding/ in local languages
- Available in 14 languages
- Various regional workshops/ webinars organized

Relaunch of ULD Safety Campaign

ULD, it's not just a box...

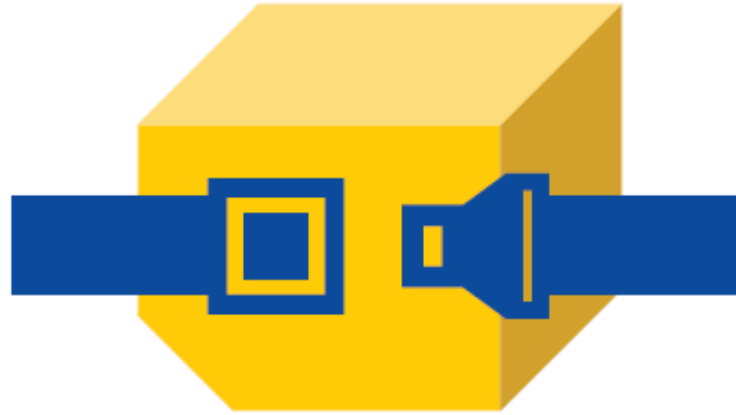
**It needs your care
and attention**



You can put the safety of
passengers, crew and
aircraft at risk

ULD, it's not just a box...

**It needs your care
and attention**



**It's a seatbelt
for the content**

ULD, it's not just a box...

**Correct handling
saves millions**



ULD repairs cost the industry

\$330 million / annum



80%

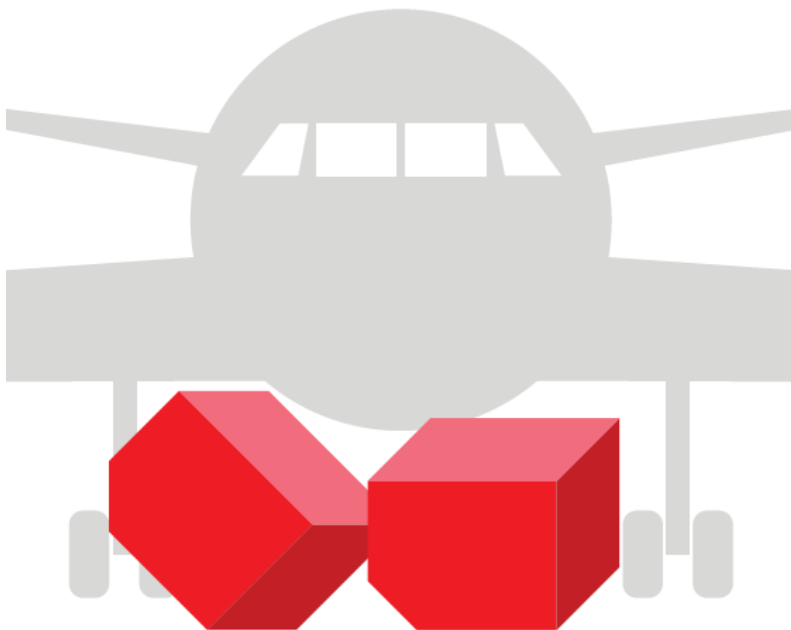
of ULD repair costs could be
avoided if handled correctly



Relaunch of ULD Safety Campaign

ULD, it's not just a box...

It can damage the aircraft



Mishandled ULD is the N°1 cause of aircraft ground damage

ULD, it's not just a box...

It delivers your promise



Incorrect ULD handling damages your profit and reputation

ULD, it's not just a box...

It's YOUR responsibility

- ✓ Handle ULD with care, it's treated as aircraft part
- ✓ Protect the passengers, crew and aircraft by loading airworthy ULDs
- ✓ Inspect ULDs prior to use and at every transfer
- ✓ Ensure all staff are properly trained
- ✓ Remember ULD build-up is aircraft pre-loading and contributes to flight safety
- ✗ Don't damage ULDs
- ✗ Don't put the safety of passengers, crew and aircraft at risk
- ✗ Don't forget to inspect ULD for damage
- ✗ Don't handle ULDs if you are not properly trained
- ✗ Don't ignore the aircraft operating limitations in ULD build-up



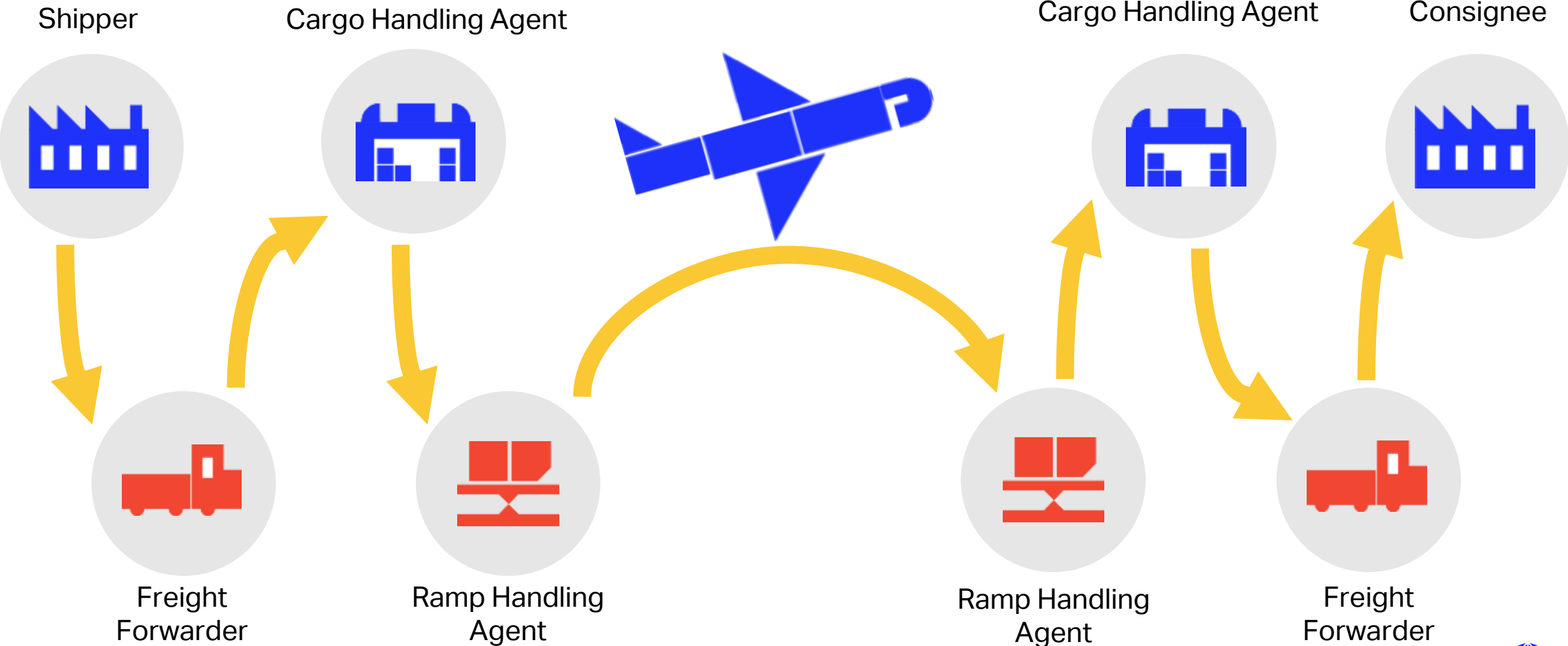
Aircraft/ULD Operating Limitations Applicable to ULD Build-Up:

- Max. Gross Weight Limitation per ULD Position
- Area Load Limitation
- Linear (Running) Load Limitation
- Center of Gravity Limitation for ULD
- Aircraft Contour Limitation for ULD
- Pallet and Net Compatibility Limitation
- Non-certified Aircraft Container Acceptability
- ULD Operational Max. Gross Weight
- ULD Max. Allowable Damage Limitation

**Always Remember:
ULD build-up is aircraft pre-loading!**



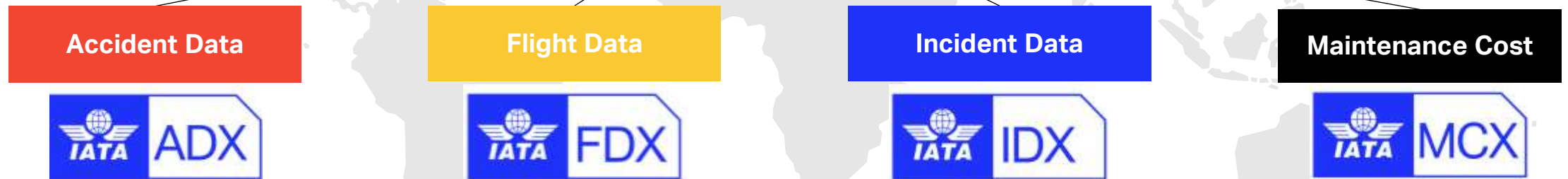
Promote ULD Safety Compliance across Air Cargo Supply Chain



Global Aviation Data Management

- IATA's Operations, Safety & Security Division
 - Safety & Operational Data and Analytics Programs

GADM



GADM Participants Overview

GADM Members

276 Participants

IDX Participants

256 Participants

FDX Participants

200 Participants

IDX Reports (*submitted in 2023*)

+214K Events

The members are keep **growing**



Road to Analysis

Operational Units

- Dangerous Goods
- Bird Strike **
- Flight Operations
- Ground Operations
- Security
- Engineering and Maintenance
- Occupational Health and Safety
- Dangerous good carriage, dangerous goods handling, dangerous goods security procedures,
- Runway excursion, runway incursion, tail strike, LOC-I, TCAS, unstable approach,
- Unruly Passenger, Smoke/Fire/Fumes, Turbulence, Inadvertent Slide Deployment,
- Aircraft Damage, loading errors, ULD, load control, etc

** Here we classify Bird Strike as an "operational unit" just for display purposes, but we do acknowledge it is not one.



Thank you!

Andre MAJERES

Head of eCommerce, Cargo & Mail Operations
Operations, Safety and Security (OSS). IATA

majeres@iata.org | www.iata.org



Cargo Facility of the Future



Marcel Langeslag
Director Aviation Africa, NACO



The Airport Agri-Hub: Unlocking Resilience through Real Estate and Air Cargo Developments in Africa

"Cultivating the Future of African Aviation: The Rise of Agri-Focused Airport Cities"

NACO is a world-leading aviation consultancy and airport engineering firm

Over
70 years'
experience

Projects at
700 airports
worldwide

Supported by 6000
multi-disciplinary
professionals of group
company – Royal
Haskoning DHV

Over 150
colleagues
from 25+
countries

Expertise



Sustainable Aviation
and Climate Resilience



Airport
Infrastructure



Customer
Experience



Air Cargo and Intermodal
Transport Hubs



Asset Optimisation, Airport
Systems and Operations



Airport Master Planning
and PPP Transactions



Air Traffic Forecasting
and Economics



Airport Buildings
and Terminal Design

Unlocking Resilience through Real Estate and Air Cargo Developments in Africa

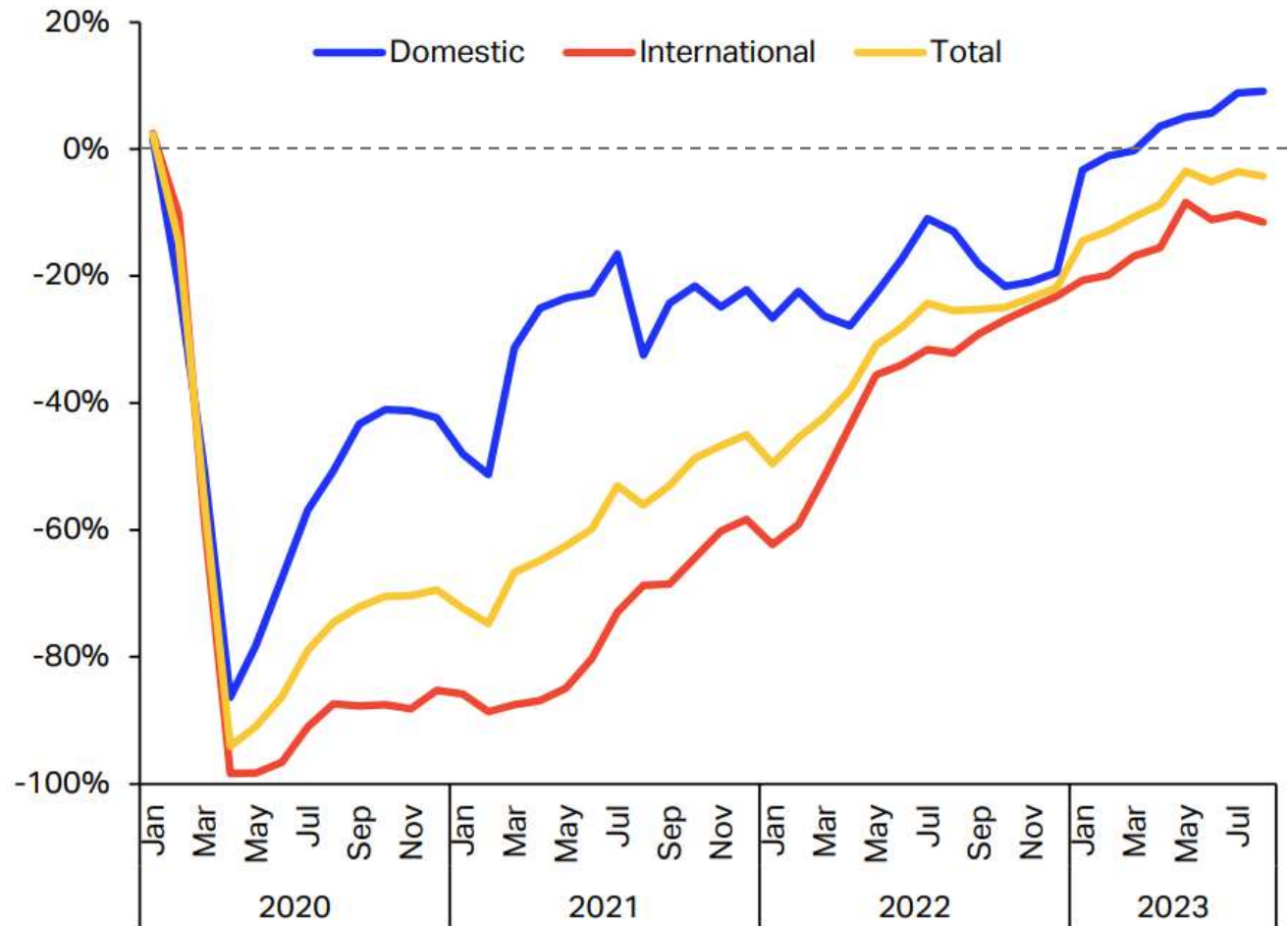


Chapter 1

Air Traffic

Pandemic impact and recovery

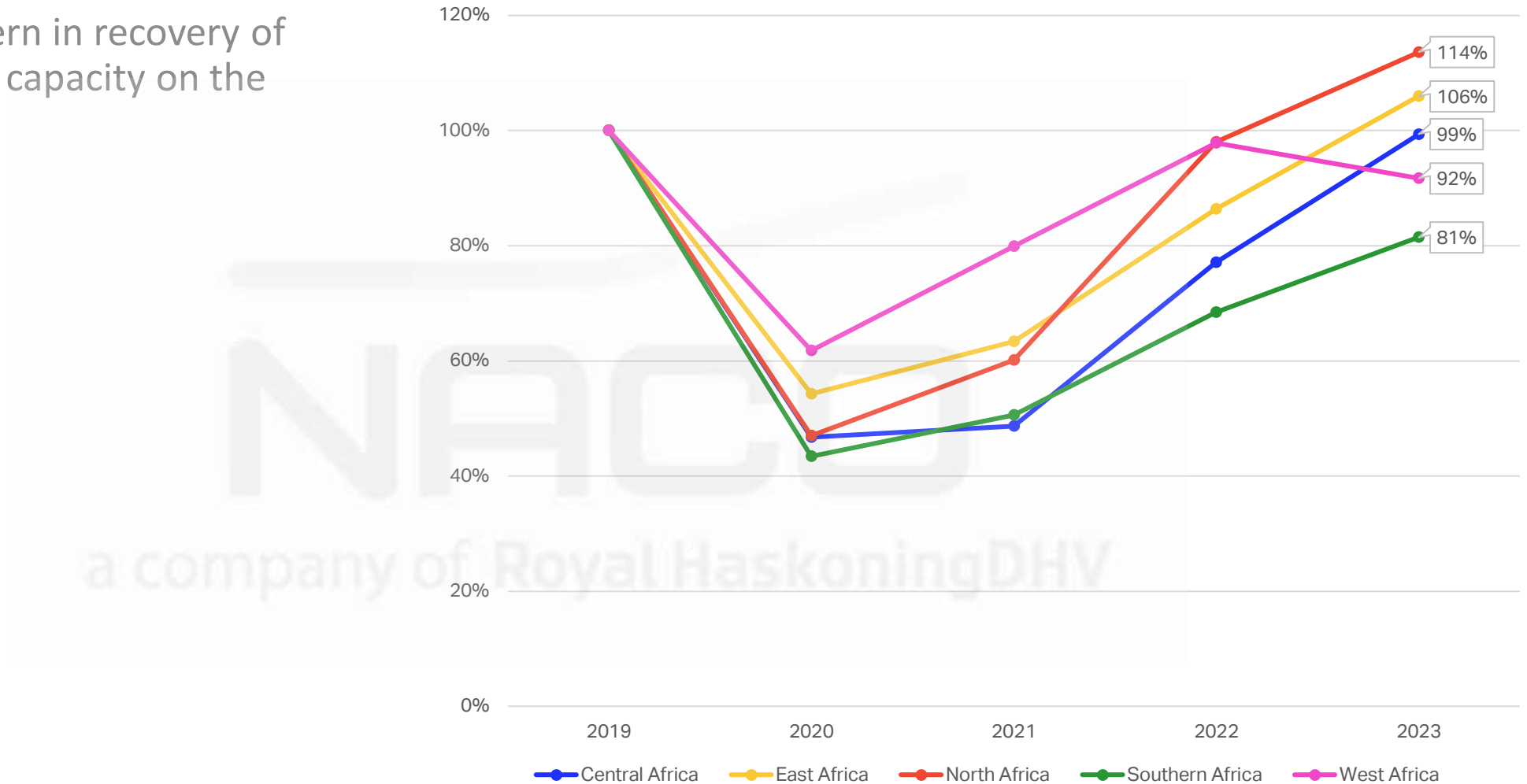
- Domestic traffic recovering faster than international
- Revenue-passenger-kilometers (RPKs), YoY% change vs. 2019



Source: IATA

Pandemic impact and recovery

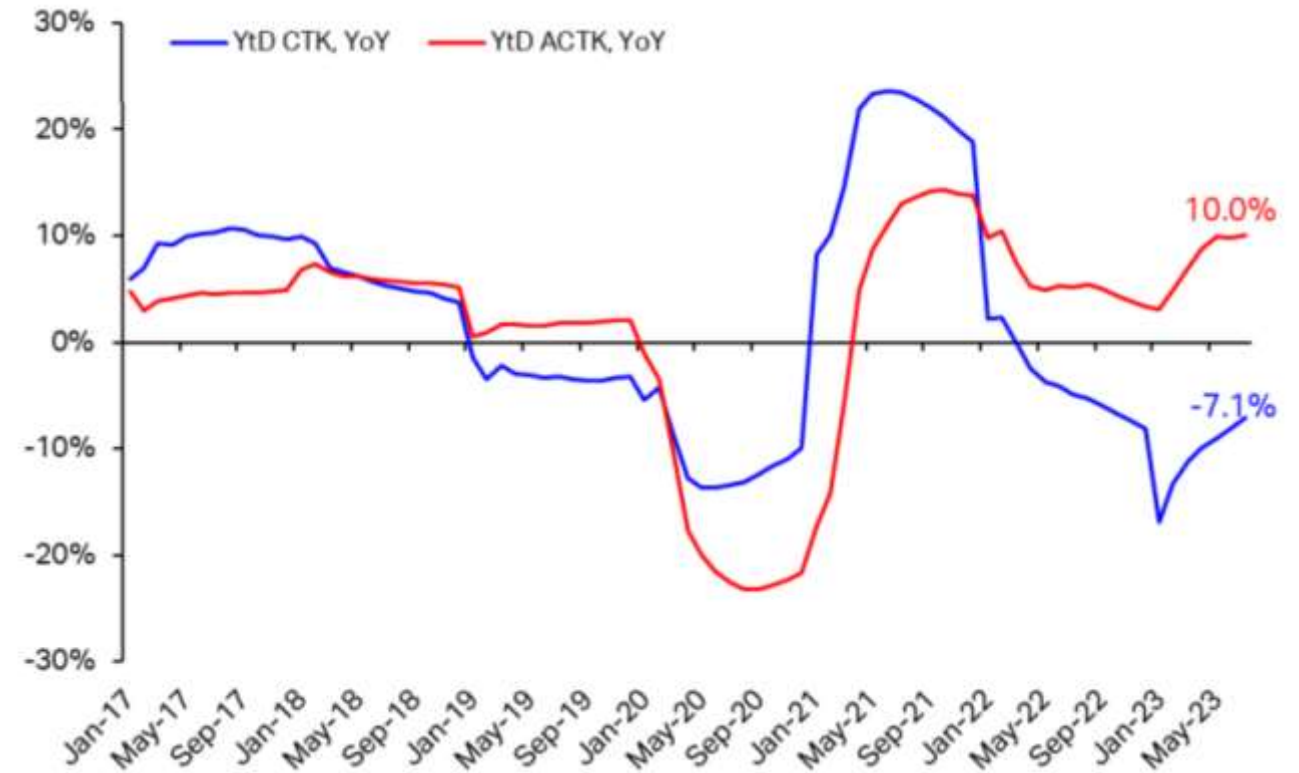
- Divergent pattern in recovery of scheduled seat capacity on the continent



Source: Diio Mi

Pandemic impact and recovery

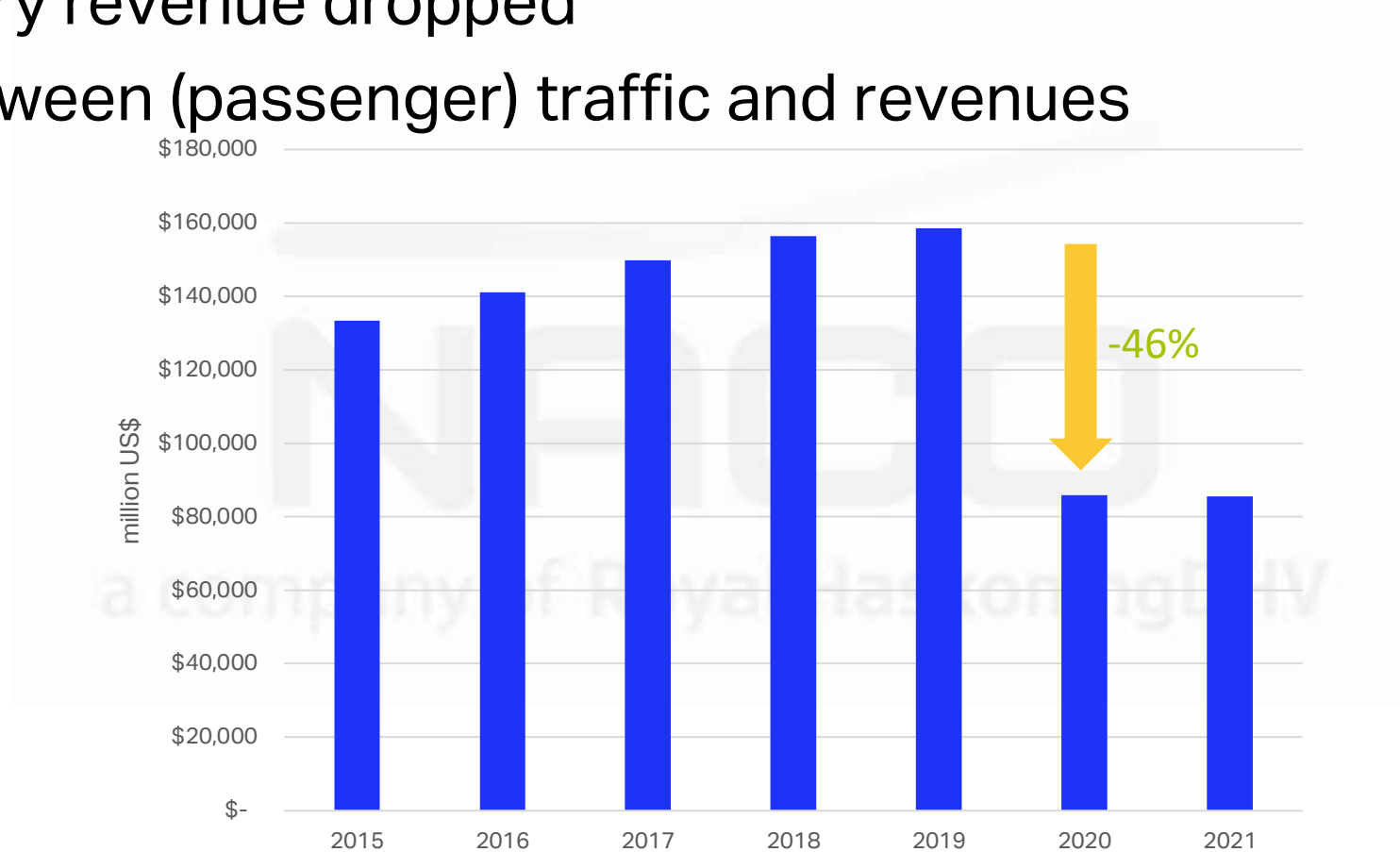
- Softening of air cargo demand (CTK)
- Air cargo capacity (ACTK), increased primarily due to restoration of belly cargo capacity



Pandemic impact and recovery

Airport industry revenue dropped

Direct link between (passenger) traffic and revenues



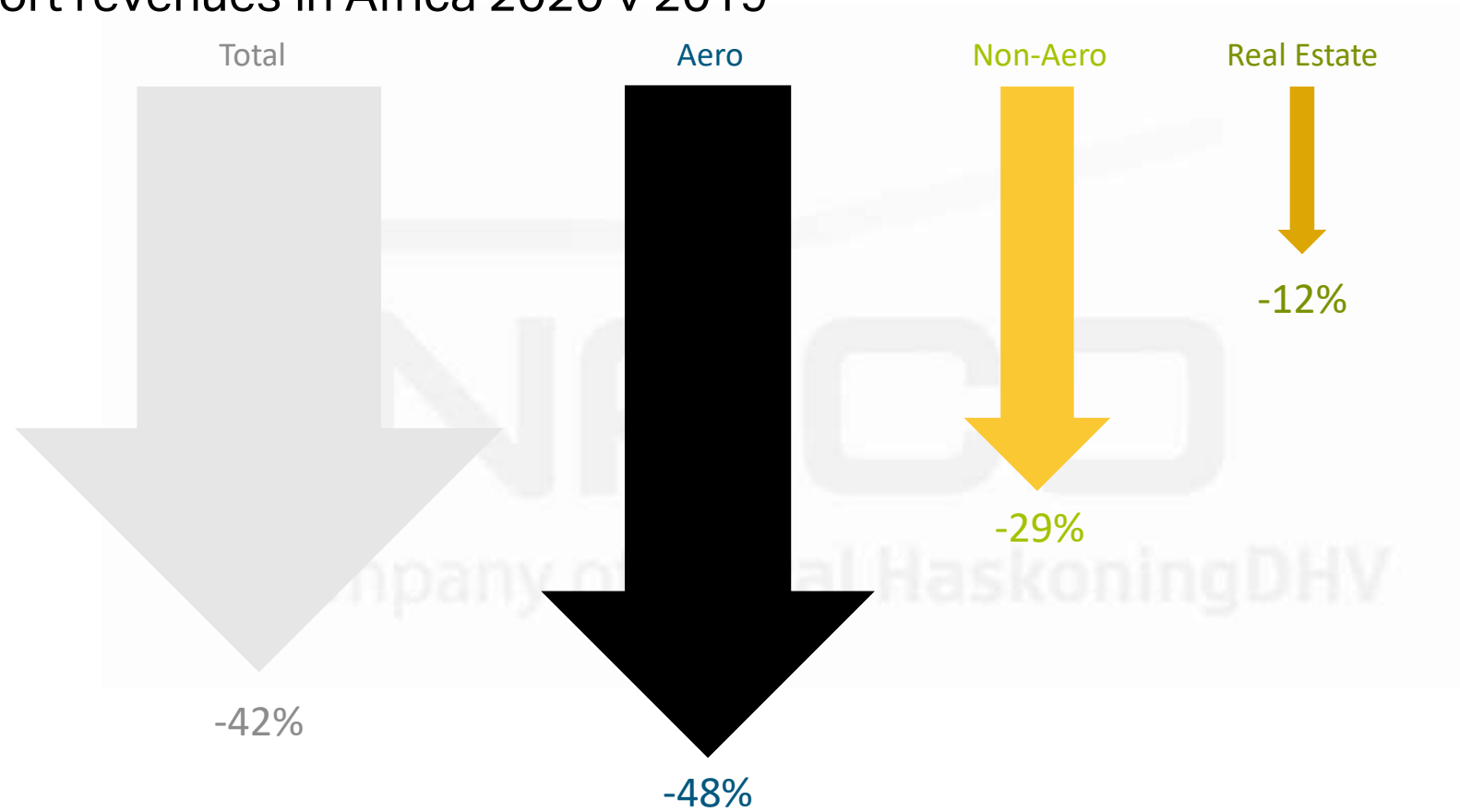
Source: ACI Economics Report 2023

Chapter 2

Airport Revenue

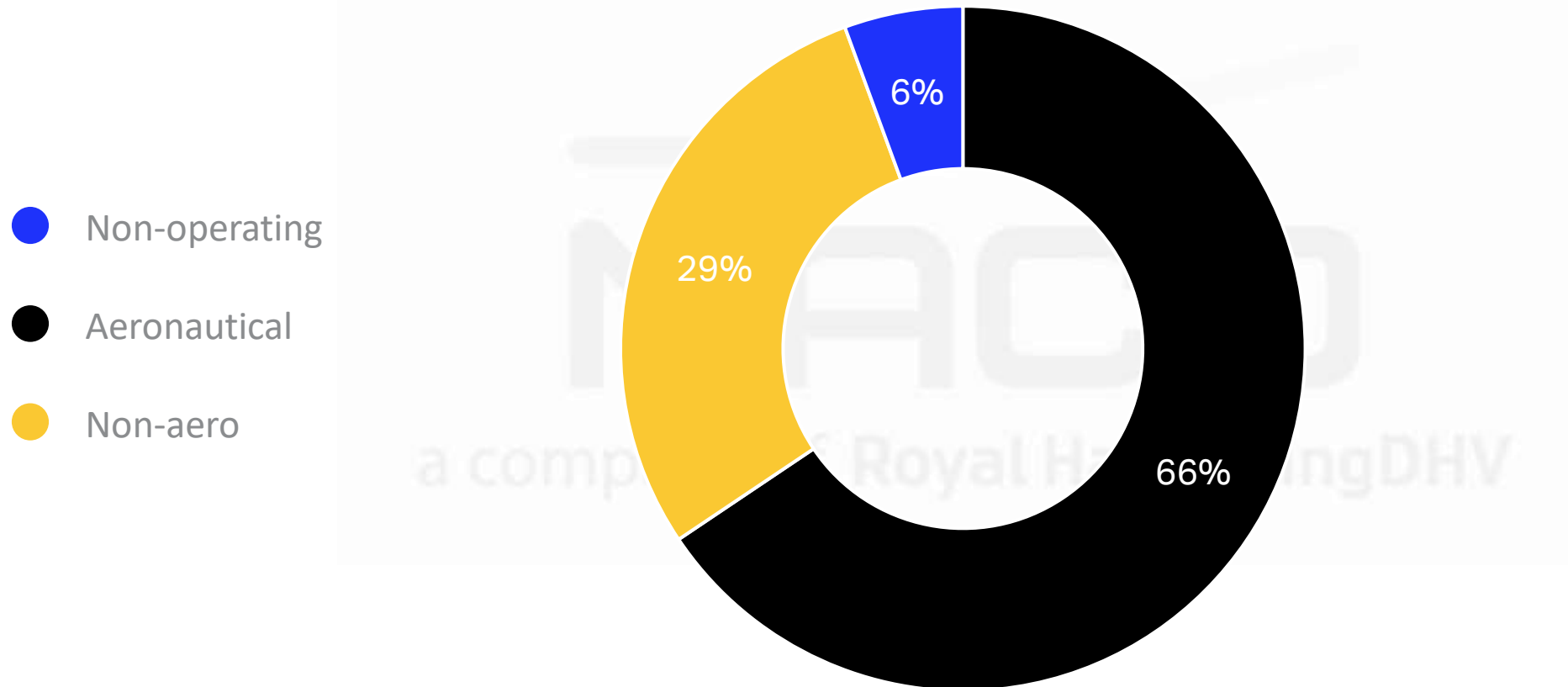
The case for airport real estate

Decline in airport revenues in Africa 2020 v 2019



The case for airport real estate

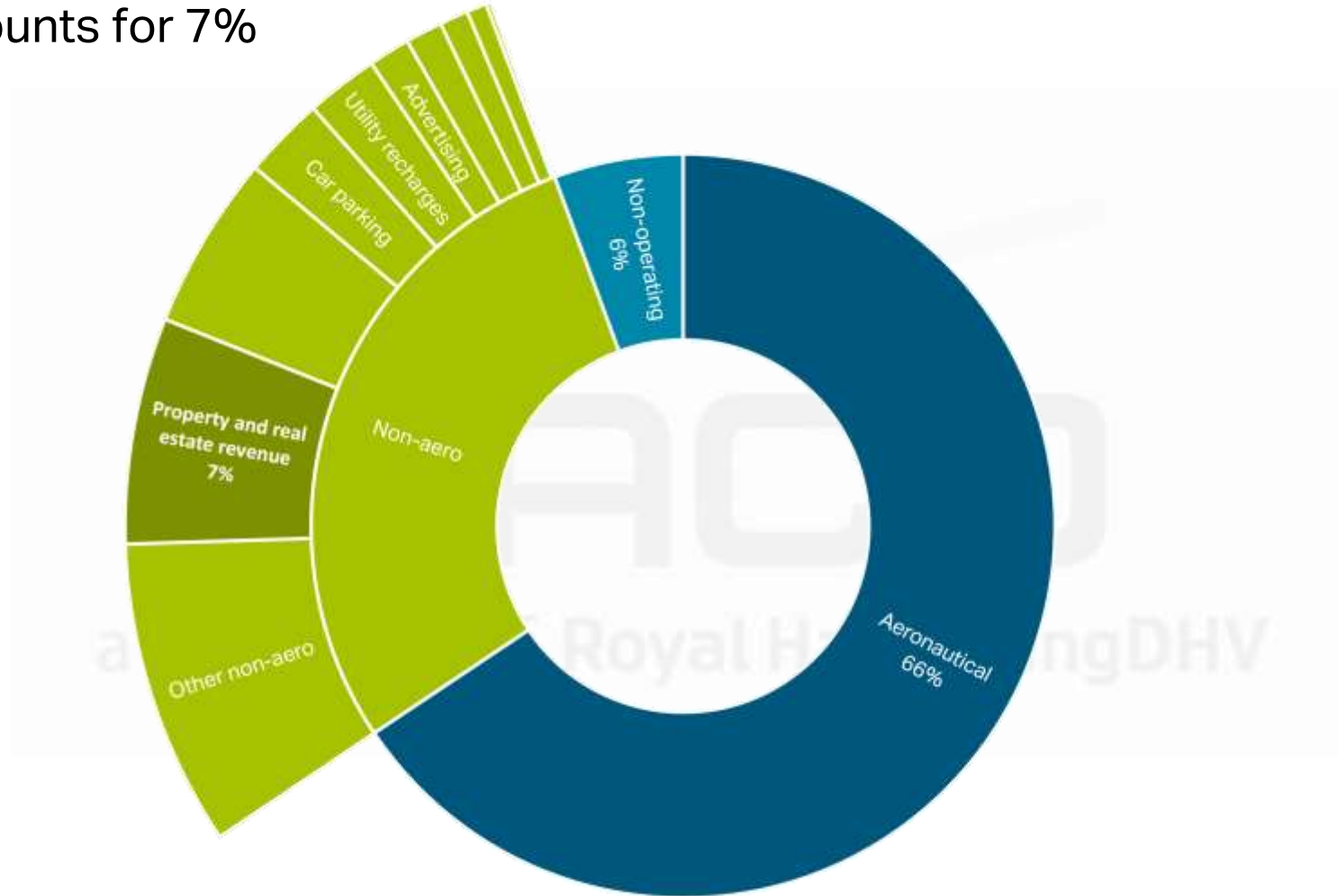
African airports rely heavily on aeronautical income



The case for airport real estate

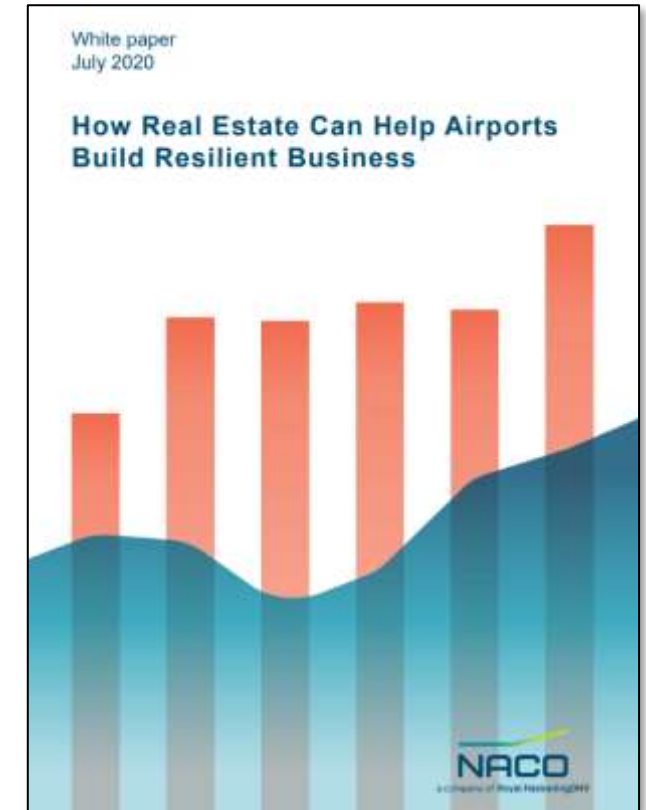
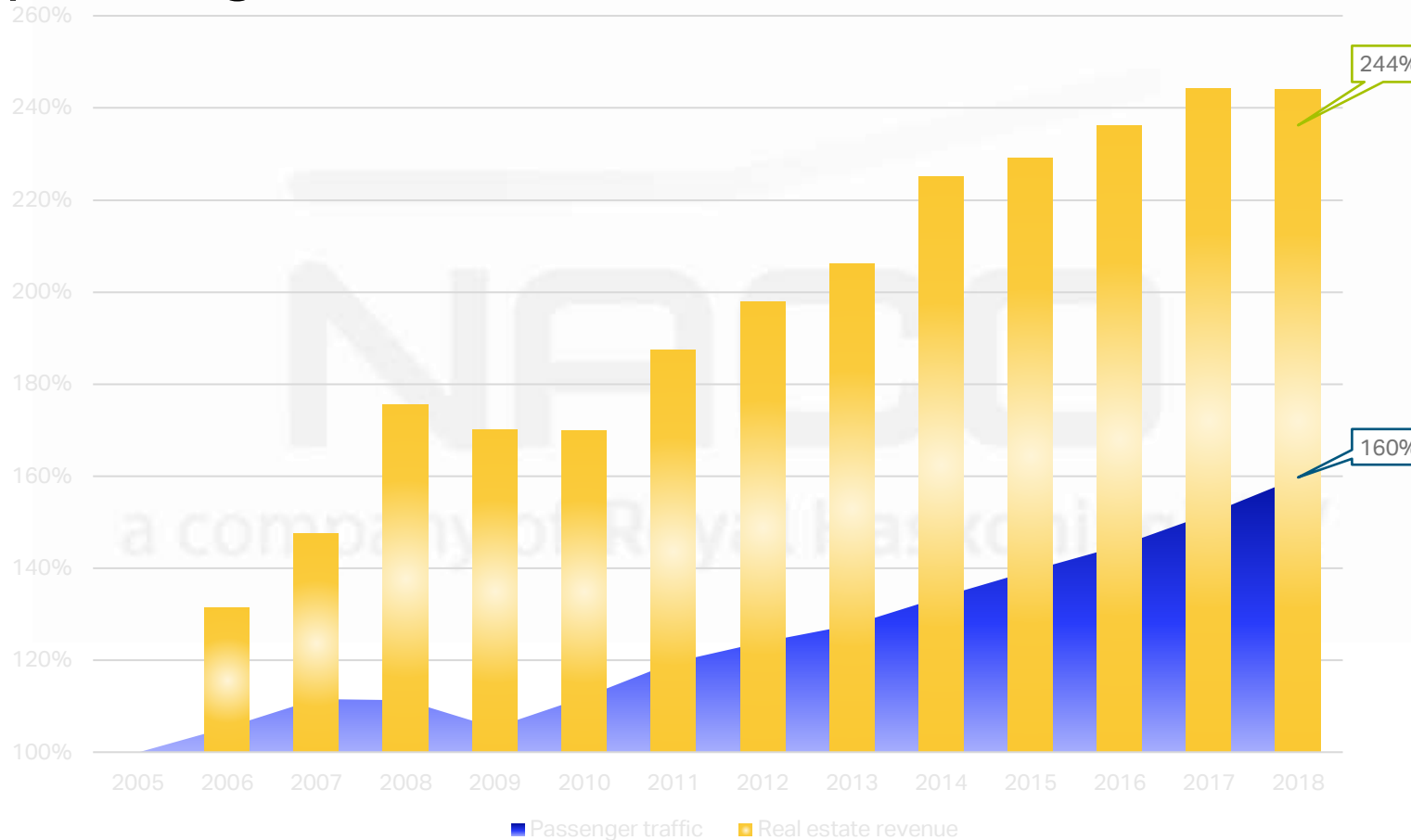
Real estate accounts for 7%

- Non-operating
- Aeronautical
- Non-aero



The case for airport real estate

Real estate revenue outpaces passenger traffic



Chapter 3

Macro-trends and Industry Developments

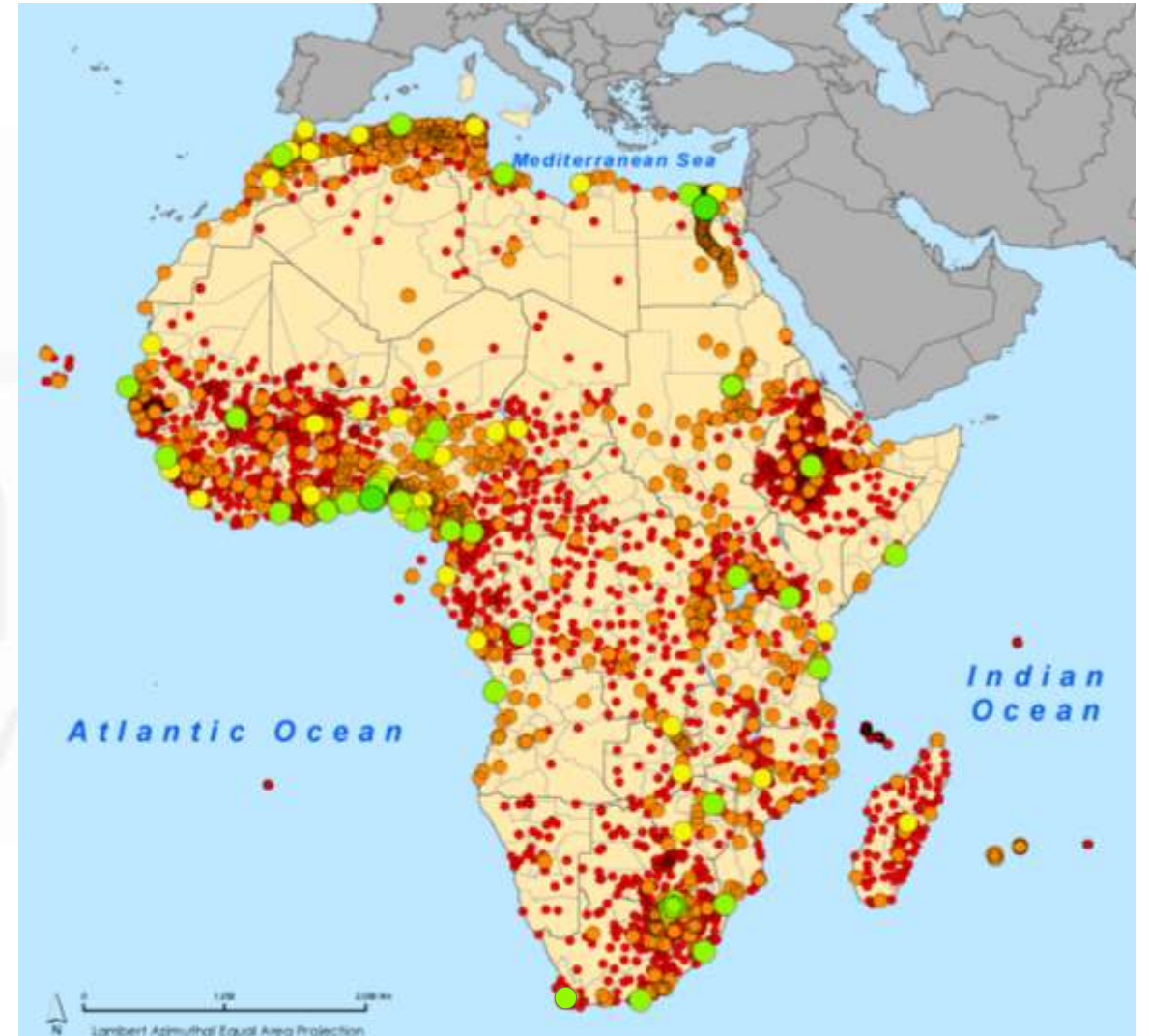
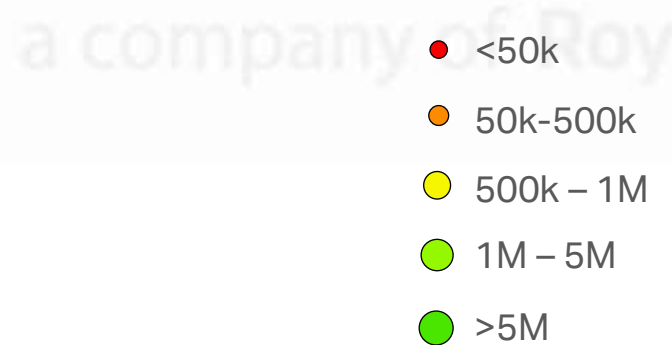
Urbanization in Africa

By 2050...

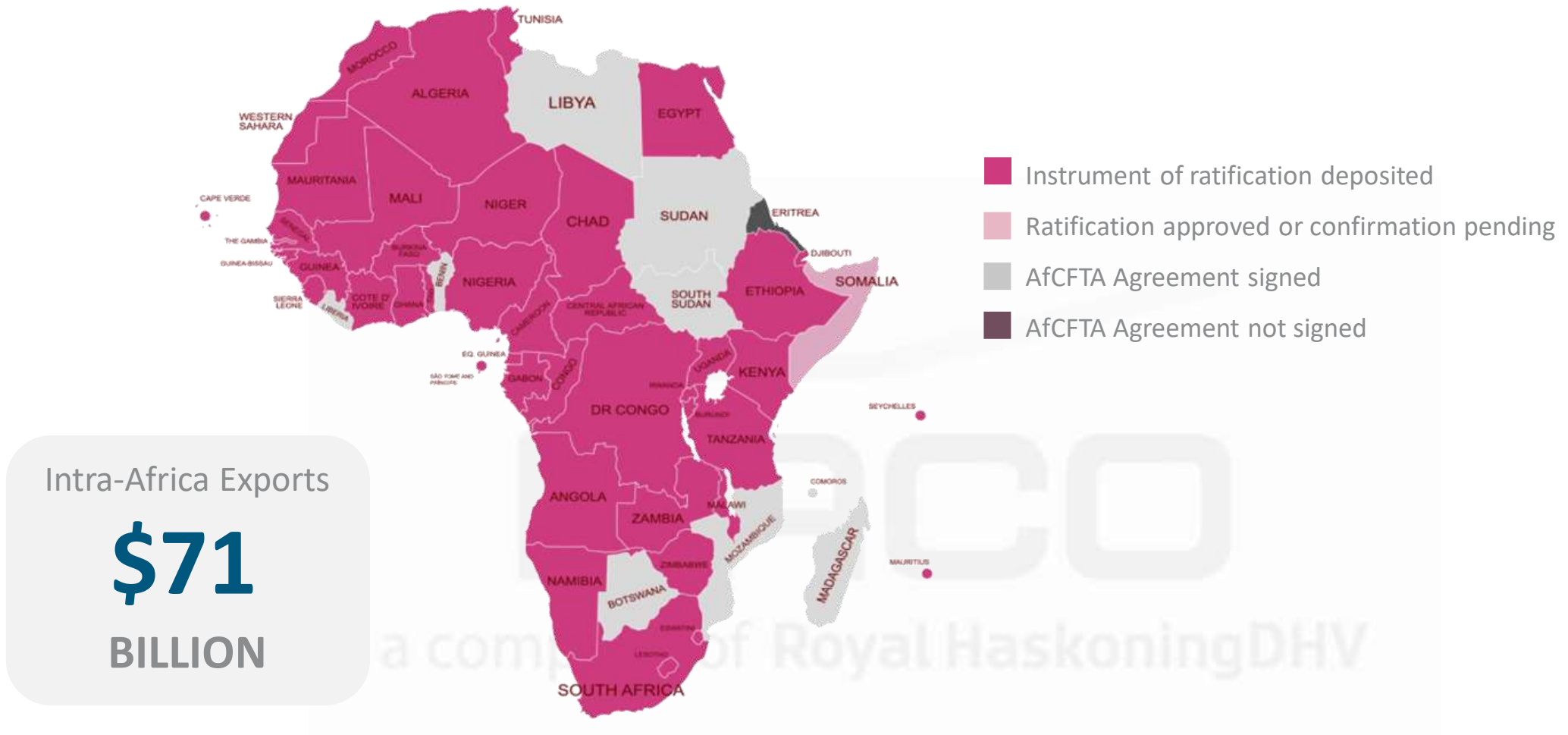
Urban population will double

57% of people will live in cities

Over 30 cities with more than 5 million people



In 2022, Intra-African Exports represented \$71B, a number anticipated to be catalyzed by the full implementation of the African Continental Free Trade Area (AfCFTA)



Provided full implementation, the Single African Air Transport Market is anticipated to generate up to \$4.2b over the next 20 years

Anticipated CAGR over the next 10 years

Without SAATM

5.5%

With SAATM

6.6%

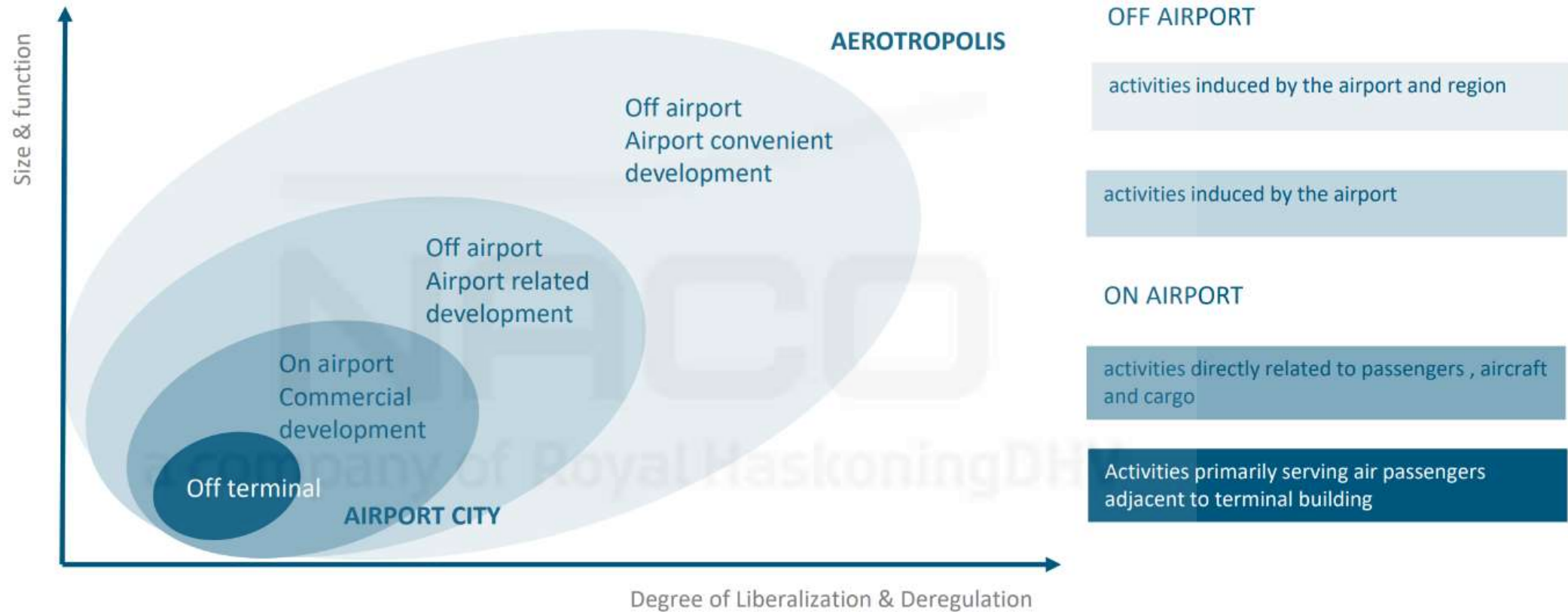
+ USD 2.5b to 4.2b

a company of Royal HaskoningDHV

Chapter 4

Airport Real Estate & Cargo Development

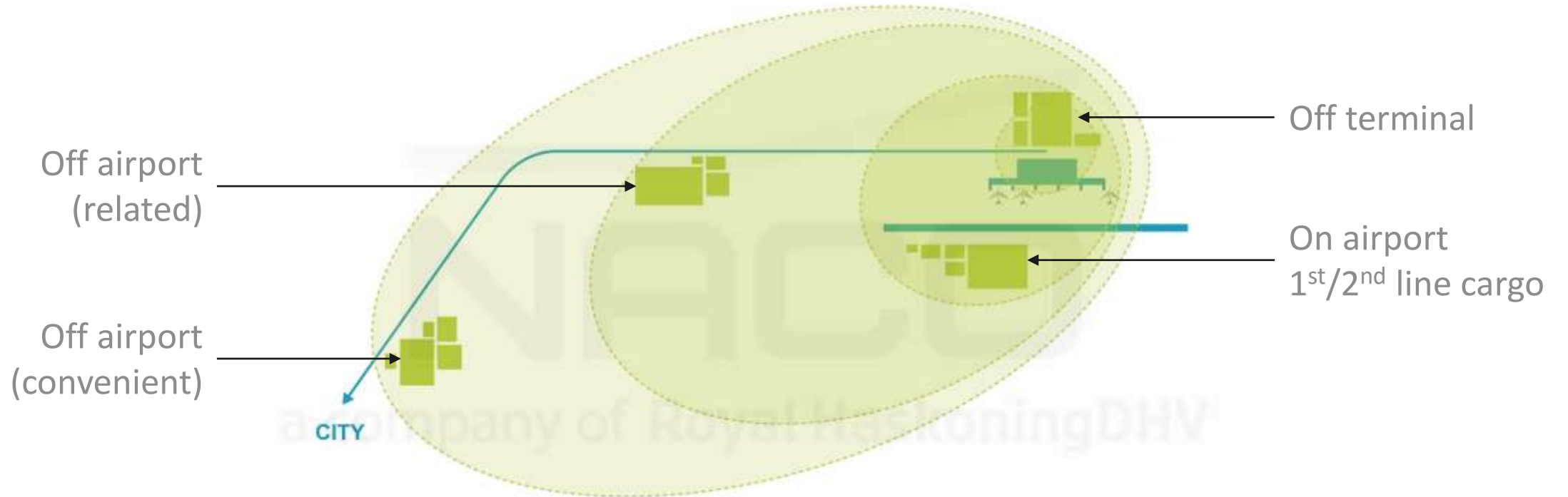
Airport real estate development



Airport real estate development

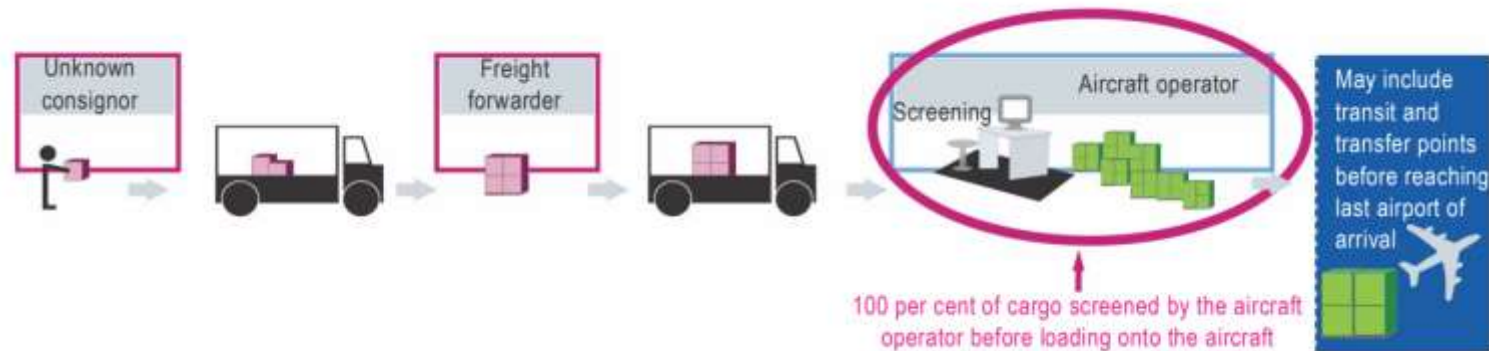


Airport real estate development



Securing the air cargo supply chain

ICAO & World Customs Organization (WCO): Moving Air Cargo Globally
Security controls applied by aircraft operators



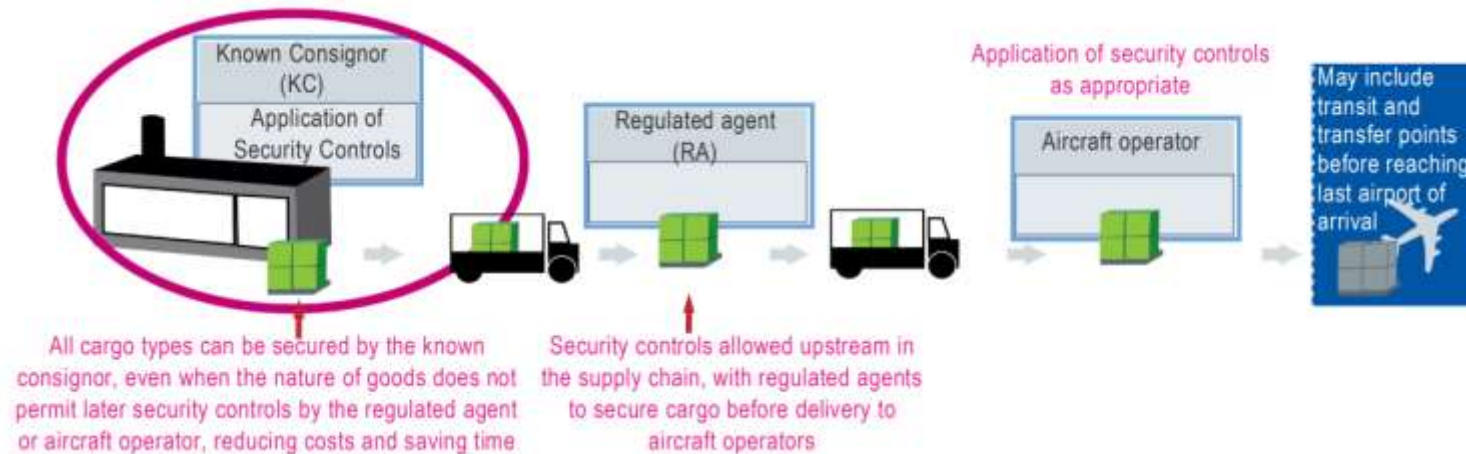
Securing the air cargo supply chain

ICAO & World Customs Organization (WCO): Moving Air Cargo Globally
 Security controls applied by regulated agents



Securing the air cargo supply chain

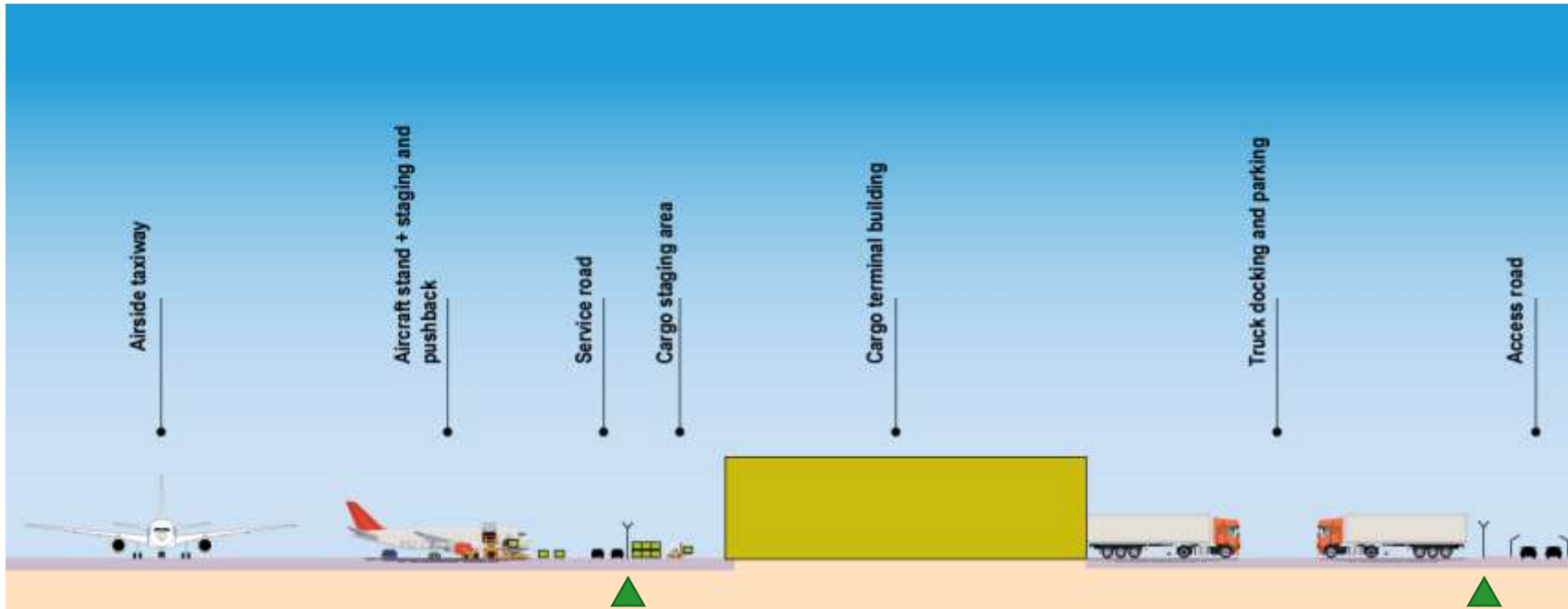
ICAO & World Customs Organization (WCO): Moving Air Cargo Globally
 – Security controls applied by known consignors



First line facility design

Landside-airside boundary

Landside precinct interface



Securing the air cargo supply chain

Multiple stakeholders and operating models





Thank you!

www.naco.nl

E: marcel.Langeslag@rhdhv.com

M: +27 (0)76 481 3743

Cargo Standards



Andre Majeres

Head of eCommerce and Cargo Operations, IATA



안전 조업의 시작은

안전

안전

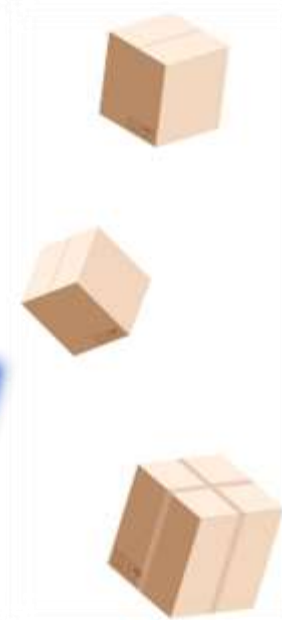


Landside activities with airside connections



Cargo Priorities

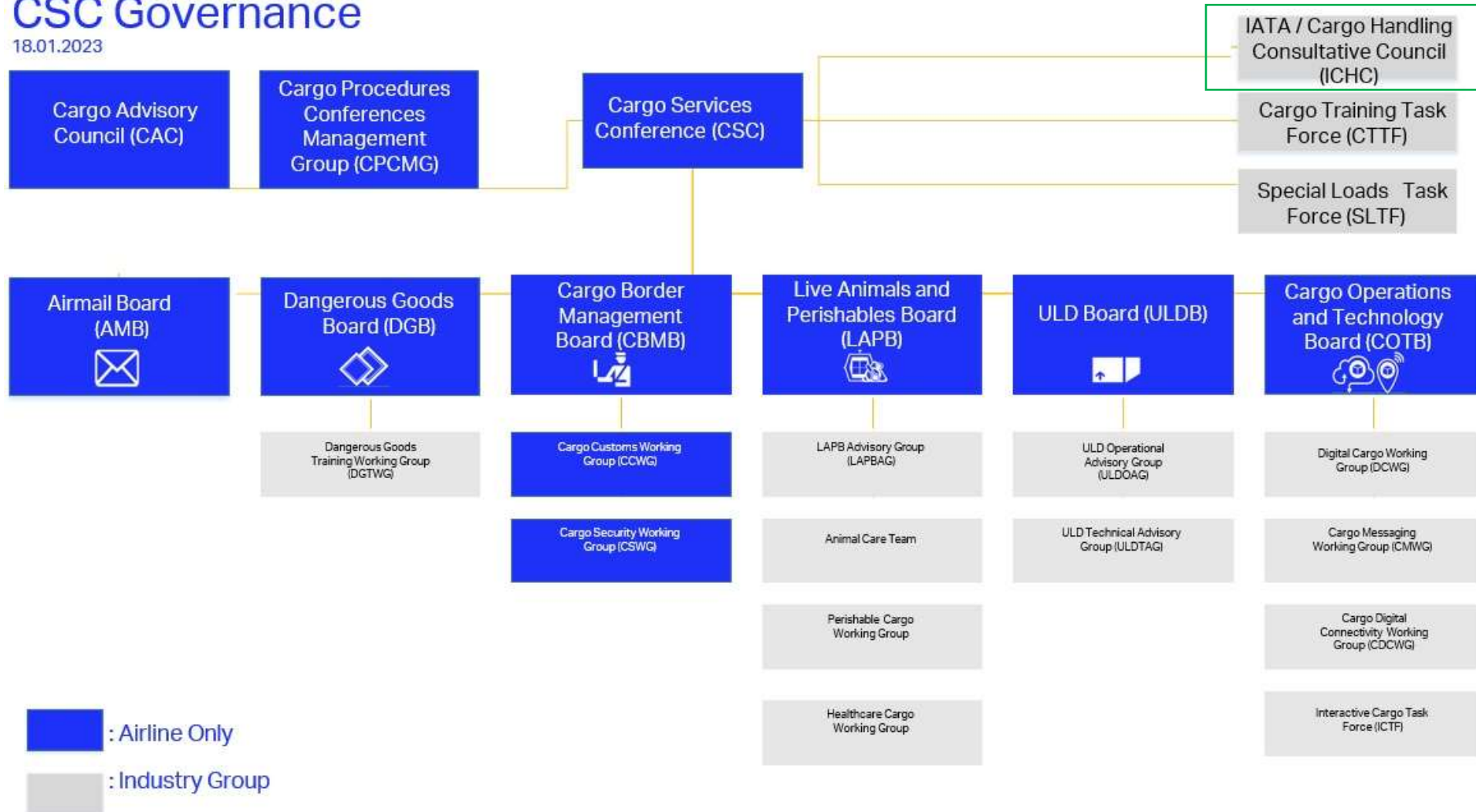
- Safety and Security
- Digitalization
- Sustainability



IATA Cargo Handling Council (IHC)

CSC Governance

18.01.2023



IATA Cargo Handling Manual (ICHM)

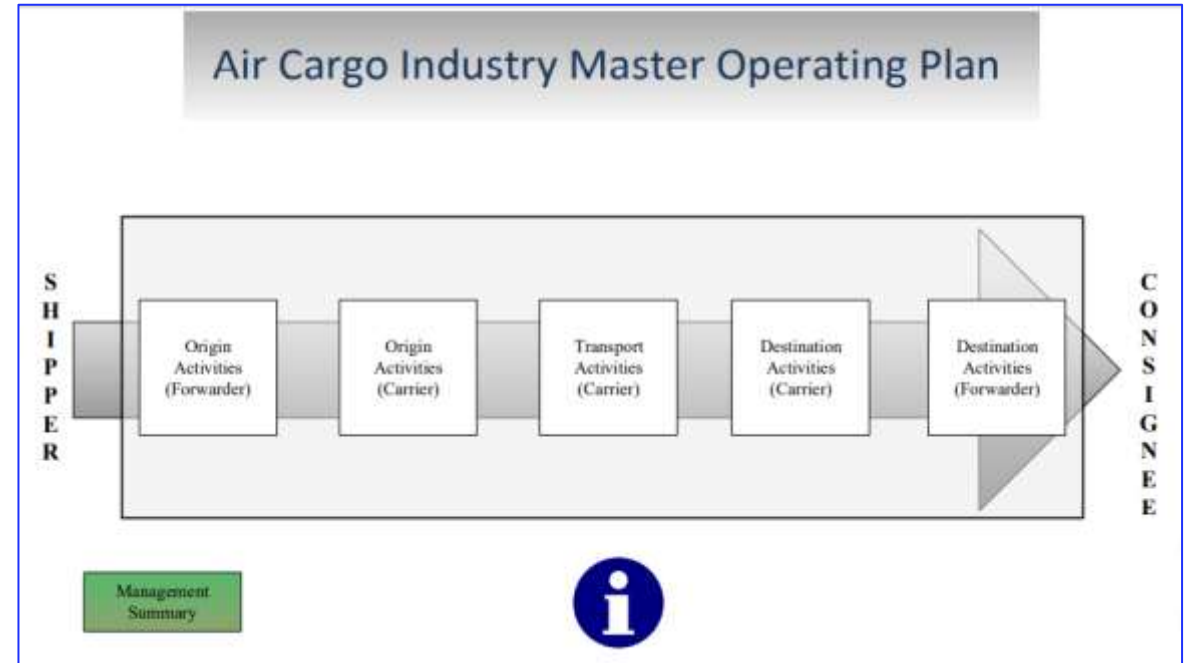
2017- ICHM 1st Edition is published
505 (2022) vs. 444 (2021)



ICHM & Industry MOP

Master Operating Plan (MOP)

- The industry MOP maps the processes and sub-processes typically involved in the planning and movement of air cargo consignments from shipper to consignee.
- A total of **19 main processes** have been identified and belong to one of five categories. The 19 processes are detailed in sub-processes and additional information is in then in turn available.
- https://docs.wixstatic.com/ugd/722a02_e289dc70805f4bd491a467906f728abc.pdf



ICHM & Industry MOP




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IATA Cargo Handling Manual (ICHM)

- The IATA Cargo Handling Manual (ICHM) is a complete set of standards for everyone involved in cargo operations. The ICHM helps airlines and cargo handlers to operate more effectively together, to improve efficiency and safety in air cargo operations.
- The ICHM brings together the **90%** of information that is common to individual carrier cargo handling manuals
- <https://www.iata.org/publications/store/Pages/iata-cargo-handling-manual.aspx>



Hundreds of Handlers @ Thousands of Airports

The Benefits

➤ **Harmonization & Standardization**

ICHM is the single industry standard that ensures core cargo operations are performed in a harmonized way.

➤ **Quality**

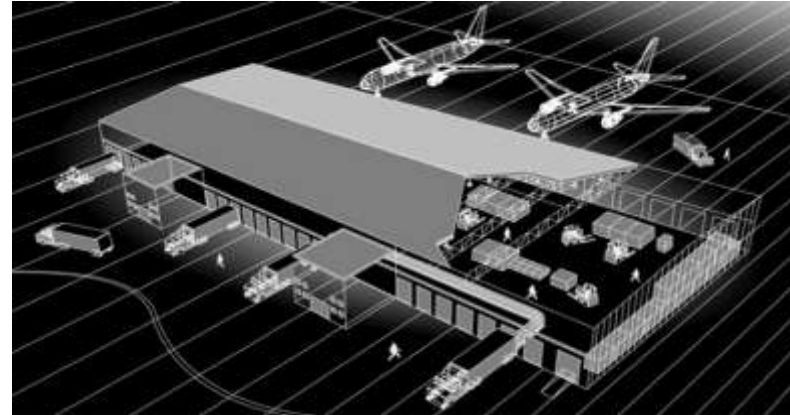
ICHM eliminates the complexity of today, to make the industry more scalable for tomorrow's demands.

➤ **Efficiency**

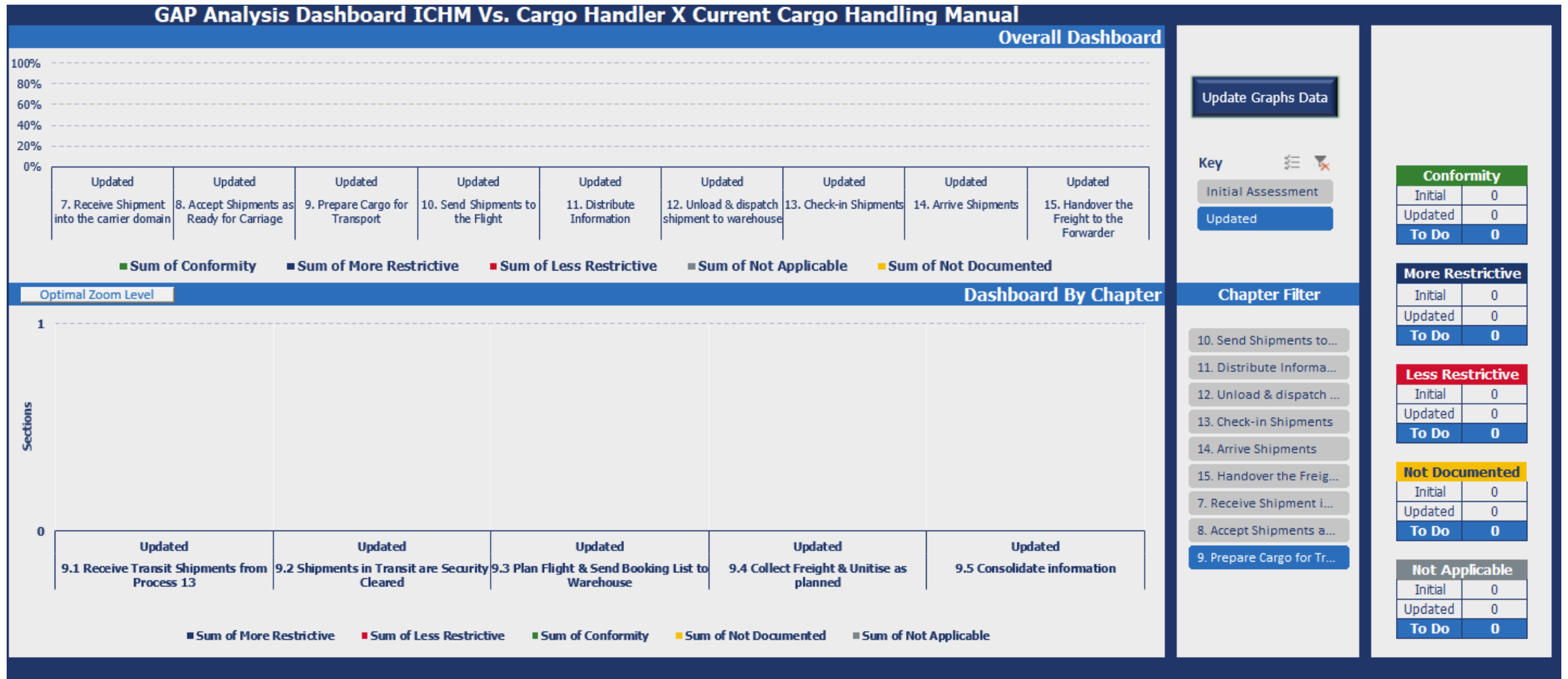
ICHM provides a streamlined approach which helps reduce costs, improve speed and efficiency

➤ **Logistics chain**

Freight forwarders and shippers are able to see where their processes impact the cargo operation



Gap Analysis – 1st step to compliance!



From basic to excellence!



IATA Cargo Handling Manual (ICHM) 2023 Changes

The Changes

- **Introduction to One Record**
 - **Future work will be to understand operational impact**
- **Interactive Cargo – Operational Requirements**
 - **At Booking**
 - **Sending XFWB**
- **Scales Calibration requirements**
 - **Process**
 - **Timelines**
- **Segregation Chart**
- **Cargo Damage Report Template**
- **Operational Risk Assessment**
 - **Risk identification**
 - **Risk Mitigation**
 - **Risk Index**



The ORA – Operational Risk Assessment

Risk Index Rating

By combining the occurrence probability and the severity of the risk (i.e. likelihood x severity), a risk index rating can be assigned. This risk index rating will give an indication on how tolerable the risk is and can assist and guide an operator to put more focus and investment on risk mitigation measures for the high-risk areas.

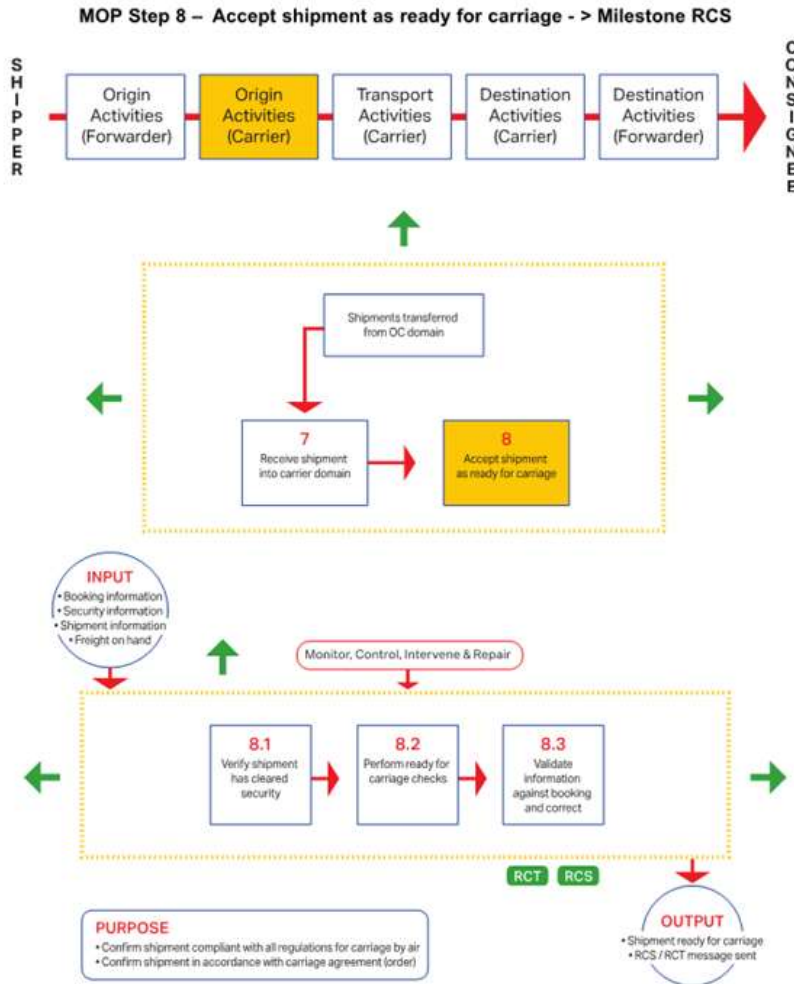
Operational Risk		Severity				
Probability		Catastrophic A	Hazardous B	Major C	Minor D	Negligible E
Frequent	5	5A	5B	5C	5D	5E
Occasional	4	4A	4B	4C	4D	4E
Remote	3	3A	3B	3C	3D	3E
Improbable	2	2A	2B	2C	2D	2E
Extremely improbable	1	1A	1B	1C	1D	1E

Table 3 – Example of an operational risk matrix

Operational Risk Index Range	Operational Risk Description	Recommended Action
5A, 5B, 5C, 4A, 4B, 3A	INTOLERABLE	Take immediate action to mitigate the risk or stop the activity. Perform priority operational risk mitigation to ensure additional or enhanced preventative controls are in place to bring down the operational risk index to tolerable.
5D, 5E, 4C, 4D, 4E, 3B, 3C, 3D, 2A, 2B, 2C, 1A	TOLERABLE	Can be tolerated based on the operational risk mitigation. It may require management decision to accept the risk.
3E, 2D, 2E, 1B, 1C, 1D, 1E	ACCEPTABLE	Acceptable as is. No further operational risk mitigation required.

Table 4 – Possible operational risk tolerability

The ORA – Operational Risk Assessment



General: Shipment security status needs to be checked, Ready for carriage checks need to be performed and ultimately the actual shipment needs to match the booking. In this process checks and balances on several items such as adding or adjusting SHC's or relaying the security data in the FWB are performed.

Hazard		Risk
Security status unknown or jeopardized Data to be sent to and used by downline stations is insufficient or incorrect	⚠	1. Unsecure cargo is a high risk for an airline, security status needs to be (re-)established
Shipment does not match the booking	⚠	2. Security data not available for downline stations-needs to be present or in the FWB
		3. (security)data to be sent to downline stations is insufficient or incorrect which leads to seizures by customs authorities to verify the content of a shipment. Also redirecting an aircraft due to unsecure shipments is a risk
		4. Carrier Customs Declaration (ACI) is incorrect which will lead to fines or penalties
		5. Missing or incorrect Special Handling Codes (SHC) might lead to mishandling of the shipment or even pose risks due to insufficient segregation or separation of the cargo

How to Prevent those Risks

1. Always establish the security status of a shipment and, if applicable, relay the information as per RA regimes in the FWB message
2. Always make sure that the shipment documents match the actual booking
3. Never assume that all data is available, check for missing or incorrect SHC's

The primary objective for cargo acceptance is to ensure that consignments are 'Ready-for-Carriage' in compliance with:

- carrier requirements;
- local export rules and regulations;
- rules and regulations of the transit airport(s) and air spaces, if any;
- import regulations of the destination country or station.

Compassionate Transportation Manual

Contains the guidance needed for funeral operators, airlines and freight forwarders on how to prepare, ship and handle this special cargo.

What's inside the manual

- State & Operator information
- Requirements on documentation, packing, handling, marking and labeling
- CTM checklist
- Sustainable and Environmentally friendly options
- Up-to-date government requirements pertaining to the transport of human remains
- Requirements on packing, handling, marking and labeling
- Information on the necessary documentation needed when transporting human remains
- Special shipping guidelines for infectious human remains
- Guidelines for the air transportation of human remains in reference to the Industry Master Operating Plan (MOP) and IATA CSC Recommended Practice 1683

Contributors

IATA Member Airlines - Funeral Home Associations - Manufacturers and Distributors



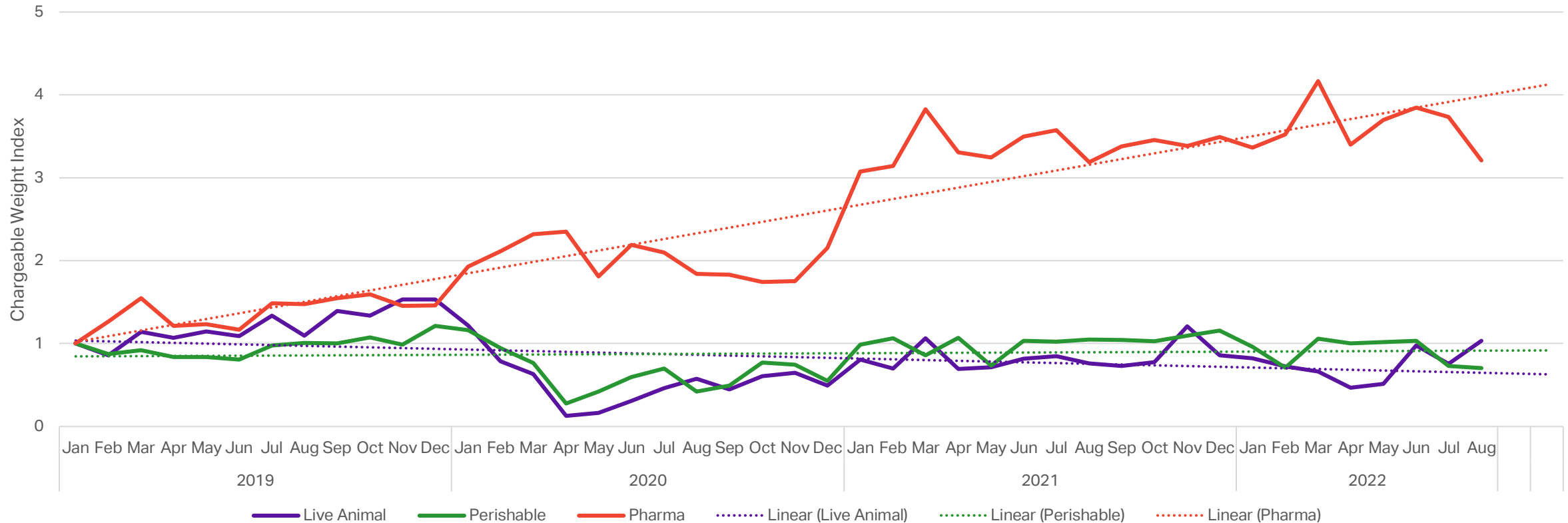
Special Cargo

Demand



Special Cargo Demand

Special Cargo Chargeable Weight Index from 2019 to 2022





Reduce illegal trade in wildlife

- Illegal wildlife trade worth between \$7 and \$23 billion a year. 4th largest illegal global trade.
- The trafficking of wildlife by-passes health checks at borders and presents a threat of disease transmission to both animals and humans.
- IATA signed a Memorandum of Understanding with the World Association of Zoos and Aquariums (WAZA) to enhance standards of transportation for live animals and benefit the conservation of species of wild fauna.

Reducing perishables waste

- Growing consumer demand for healthy products all year round.
- UN Sustainable Development Goals (UN SDGs) to “ensure sustainable consumption and production patterns”.
- Temperature excursion more frequent in transit.
- Real-time data to prevent wastes.
- Increased use of specialized storage rooms to guarantee freshness.



Growing demand for healthcare

- World's population grows, becomes wealthier and ages. Demand for treatment of chronic diseases is rising, increase in healthcare products transports.
- Deliver quickly and safely with no incident that would affect efficacy.
- Digitalization and cybersecurity drive end-to-end visibility and security of the healthcare supply chain. Temperature monitoring with real-time tracking devices for better visibility of shipments and intervention in case of deviations.
- Industry-recognized certification programs are becoming more common place for better compliance with regulations.





Digital transformation

Data quality and control

- Full control of data quality. Data stays at the source and owners grant access

Visibility and transparency

- Cover end-to-end transportation chain, from shippers to consignees. Share data with relevant parties

Plug & Play connectivity

- Facilitates direct connectivity between all stakeholders with web API. New cooperative IT solutions and innovation

Special Cargo Regulations



Standard-Setting Organization

IATA supports aviation with global standards for airline safety, security, efficiency and sustainability.

IATA sets standards for the airline industry's business processes and operations.



Live Animal Transport by Air

Animal safety & welfare considerations



Compliance
(containers, equipment, facilities, etc.)

Training, communication and information sharing



Live Animals Regulations (LAR)



2023 Significant Changes:

- In-Cabin Live Animal Acceptance Checklist
- Amendments to Shipper's Responsibilities on Sedation
- 8.1.4.1 Sedation, Tranquilization and use of Psychoactive Drugs
- Container Requirements – CR2 Container Size, Frame, Sides, Floor, Roof, etc.
- 10.1 Best Practice for Operators
- 10.3.1/10.4.1 Handling Requirements
- State & Operator variations

Time is of the essence with perishables



Delaying
premature
product
deterioration



Time and
temperature
sensitive
goods



Prevent
damage,
spoilage



Perishable Cargo Regulations (PCR)



2023 Significant Changes

- Perishable Facts & Types
- Added definitions from the IATA ULD Regulations
 - Active Temperature Controlled Container; Aircraft Container; Aircraft ULD; Non-Aircraft Container; ULD, etc.
- State & Operator variations

New! IATA Perishable Cargo Working Group

- Industry effort to enhance the IATA PCR with standards and regulations and address sustainability requirements, such as reduction of single-use plastics and product loss.



Reducing Perishable Loss in Air Cargo

What do we mean by perishable "loss"?

Perishable "loss" occurs before the goods reach the consumer as a result of issues in the production, **storage**, processing, and **distribution** phases.


Globally, around **14 percent** of food produced is lost between harvest and retail.



Strength of the Uninterrupted Cold Chain



 **Speed
Operations
Logistics**

 **Packaging
Documentation
Labeling
Storage Facilities**

Industry Collaborative Efforts



Guidance for Vaccine and Pharmaceutical Logistics and Distribution

Set of considerations and awareness on large scale handling, transport and distribution of vaccines, pharmaceutical, life science and medical products.

Industry preparedness

- Capability and connectivity
- Operational environment
- Board management
- Security environment
- Risk management
- Digital environment
- Sustainability and CO2 emissions
- Multimodal

Setting standards for industry by industry

IATA Airlines

Live Animals & Perishables Board (LAPB)
12 members

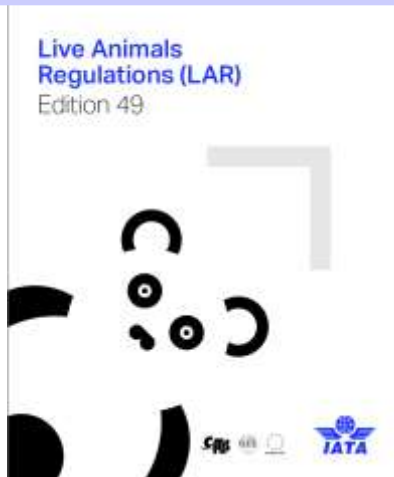
Industry Experts

LAPB Advisory Group
6 members

Perishable Cargo Working Group
20 members

Healthcare Cargo Working Group
20 members

Join us to take part in standard setting activities.



Thank you

Andre MAJERES

**Head, eCommerce, Cargo & Mail
Operations**

Contact: larper@iata.org



Introduction to CEIV.

Center of Excellence for Independent Validators



Emma Dayo

Regional Manager Cargo & Ground operations, Africa Middle East
IATA



The **Center of Excellence for Independent Validators (CEIV)** is a certification awarded to organizations recognizing their excellence in the handling and transportation of **special cargo shipments in the area of pharmaceutical, perishables, live animals and lithium batteries.**



50k

Manuals delivered

5k

Workforce trained

2.1k

Audits conducted



Insight: Key Findings & Opportunities for Improvement



Consistent Standards & Product Integrity

- Implementation across all hub/stations
- Document control system
- Management of overall resource capacity



Ensuring Animal Safety & Welfare

- Checklists incorrectly completed (AVI acceptance checklist, venomous/poisonous procedures not followed), limited evidence available
- No procedure in place for IWT



Preventing Food Loss

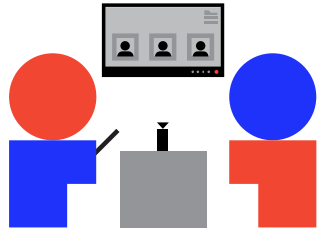
- Risk assessment at all CCPs
- Internal syllabus incomplete/out of date
- New employee training program
- Pre-planned recurrent training



Mitigating Risk of Lithium Batteries

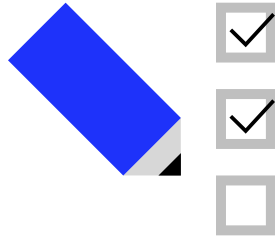
- Documents (templates) in English – Procedures/Ras/Forms/ Training

Certification Methodology



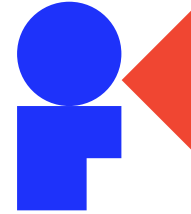
Training

- Mandatory training for personnel involved in handling of special cargoes
- Thorough review of Audit Checklist requirements in preparation for the Assessment



Assessment

- Assessment audit by Independent Validator
- Assessment versus Audit Checklist
- Comparison against best practice
- Gap analysis report with applicable findings and recommendations



Validation

- Validation audit by Independent Validator
- Validator to review progress made on recommendations established during the assessment
- Remote validation option to be determined by IV
- Certification granted if all gaps are closed



Certification

- Achieved once no non-conformances remain
- Re-certification occurs every 2-3 years
- Spot audits may occur in the interim

Re-certification & continuous improvements

Implementation Approach

Individual & Network

- One company decides to get CEIV certified at **one location**
- One company decides to get CEIV certified at **several stations**

Community

- **A group of companies** (airline, forwarders, ground handlers) decide to get CEIV certified
 - Form a “CEIV gateway”
 - Supply chain approach
 - Coordinated and/or sponsored by airport or local association

BENEFITS

Contribute to standardization of processes and procedures
Benefit from partners' knowledge and expertise through joint training
Cost-efficient solution

Center of Excellence for Independent Validators (CEIV)

Benefits

1. Ensures compliance with the latest standards
 2. Globally recognized as a sign of professionalism and expertise
 3. Delivers quality handling and transport
 4. Builds trust throughout the supply chain
- ✓ Provide your partners with **assurance and reliability** of your services **and trust in compliance** with regulations
 - ✓ **Obtain visibility** as a high-performing player in the supply chain



509
CEIV Pharma
certified stations



23
CEIV Live Animals
certified stations



43
CEIV Fresh
certified stations



34
CEIV Lithium Batteries
certified stations

ONE Source – Creating transparency and visibility



New Certifications

What is ONE Source?

Validation Programs

[JOIN](#) | [LOGIN](#)

Find validated aviation capability and infrastructure information

- [Search Wizard](#)
- [Advanced Search](#)
- [Airline](#)
- [Airport Operator](#)
- [Cargo Handling Facility](#)
- [Freight Forwarder](#)
- [Ramp Handler](#)
- [See all](#)

New Certifications



CEVA Logistics - PVG
Shanghai
CEIV Lithium Batteries

[Go To Station Profile](#)



What is ONE Source?

IATA ONE Source is the industry platform for validated aviation capability and infrastructure information. Find the right business partner for your needs, from specific infrastructure requirements such as temperature-controlled rooms to IATA certifications

- 

Free of charge
Registering your station in One Source is free of charge!
- 

Reliable
Only place to find up to date information about IATA validations, company equipment and infrastructure.
- 

Global reach
Publish your station information on a global, industry recognized platform.
- 

At your fingertips
Find the right business partners right where you need them.

Creating Industry transparency

IATA ONE Source:

- Free industry platform
- Up-to-date certification and infrastructure information
- Reliable information
- Easy to use
- Unparalleled transparency and visibility
- Enables you to find the right business partner for your needs

The screenshot displays the IATA ONE Source mobile application interface for a 'FastHandling' station. The URL <https://onesource.iata.org> is visible at the top. The interface includes the IATA logo and a map of the station location. Key sections include:

- IATA Validation Programs:** Four circular logos representing different IATA certification programs.
- Cargo Commodities:** A list of checked and unchecked items: General Cargo (checked), Dangerous Goods (checked), Perishables (unchecked), Live Animals (checked), Airmail (unchecked), and Pharmaceuticals (checked).
- Station Overview:** Key statistics such as 1,500 Employees, Total facility space 1,500 m², On-Airport status, and Direct Ramp Access.
- Equipment & Infrastructure:** A detailed table with multiple rows and columns, each ending with a colored status indicator (red, yellow, or purple).



ONE Source



https://onesource.iata.org

Results (2)

FastHandling
FastHandling Ltd.
Cargo Handling Facility

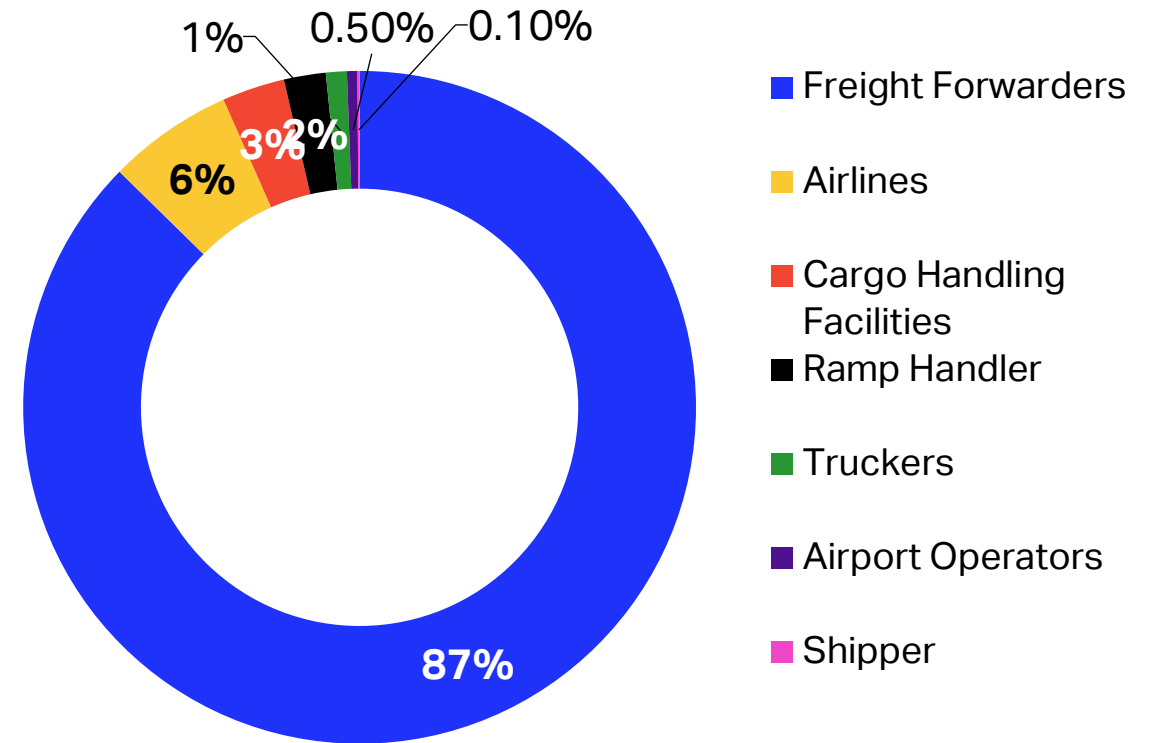
2500 Rod. Transamazônica,
São Francisco, Itaituba, Brazil

IATA Validation Programs

COMPARE (+) MORE INFO

StarFacility
StarFacility Ltd.
Cargo Handling Facility

IATA Validation Programs



5300

registered stations

524

certified companies

Find your aviation business partner



Find out more:
onesource.iata.org



What is ONE Source?

ONE Source is the industry platform for validated aviation capability and infrastructure information. Find the right business partner for your needs, from specific infrastructure requirements such as temperature-controlled rooms to IATA certifications. The platform makes it easier for you to find the right services where you need them.

Do you want to be listed?

Attract new customers by creating a free profile on ONE Source. Stand out from your competitors and highlight your facility's capacities and IATA certifications and accreditations.



Thank You

ONE Source: <https://onesource.iata.org>



Andre MAJERES

Head of eCommerce, Cargo & Mail Operations

majeres@iata.org



Focus on Pharmaceutical Transportation

Moderator:

Alex Stancu

Area Manager, Southeast Africa,
AME, IATA



Panelists:



Annette Naude,
Regional Head of Life Sciences
& Chemicals – MEA, DHL



Albashir Ismael,
Manager Special Products,
Kenya Airways

TBC

CEIV from an Airline's Perspective



Albashir Ismail
Manager Special Products- Kenya Airways



CEIV PHARMA

THE KENYA AIRWAYS JOURNEY.

ALBASHIR ISMAIL
MANAGER, CARGO SPECIAL
PRODUCTS

8TH NOVEMBER 2023



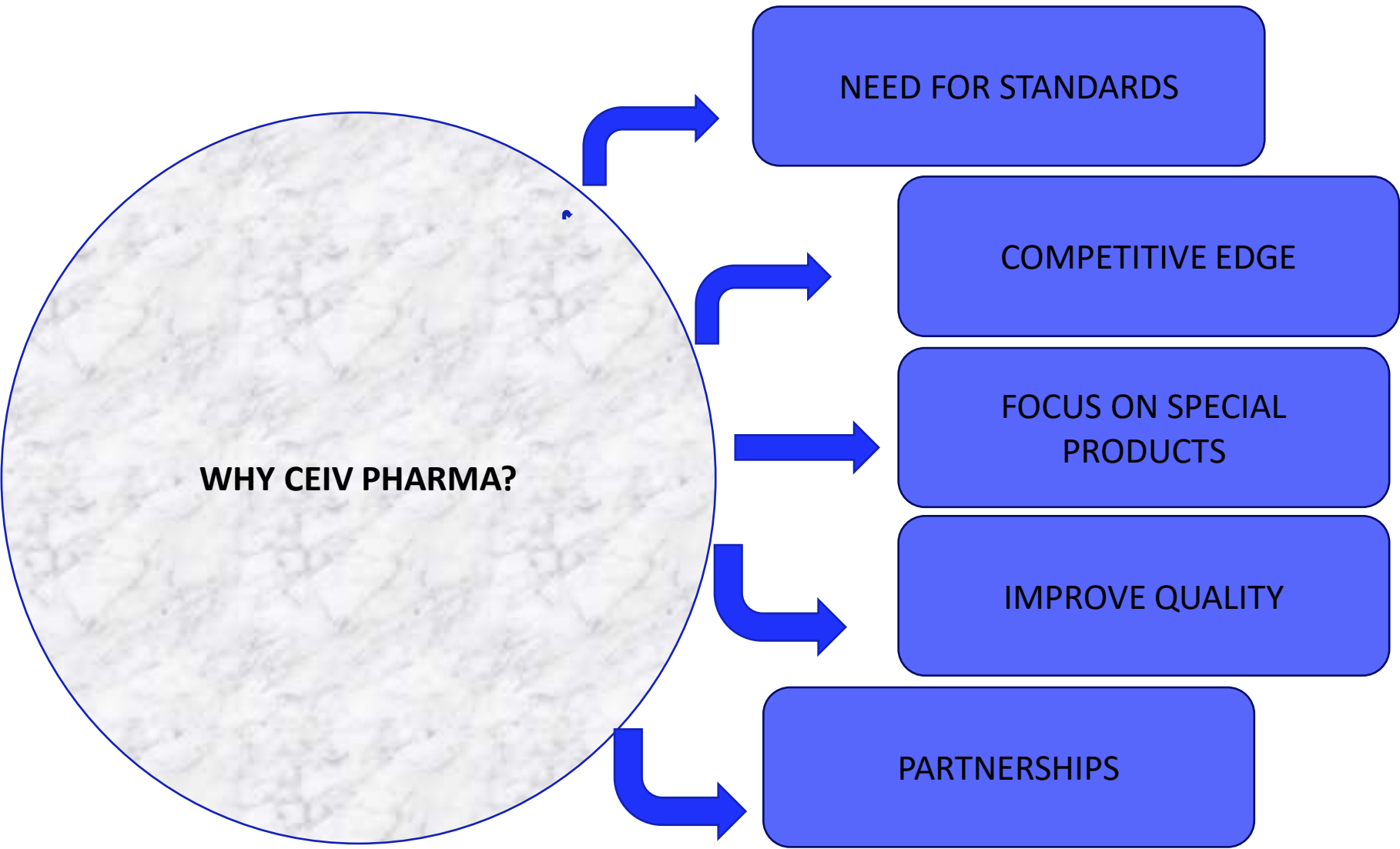
BACKGROUND

HANDLING

NO
STANDARDS

QUALITY
CONCERNS

FACILITY
LIMITATIONS



THE PROCESS

PRE-ASSESSMENT
DOCUMENT REVIEW
ONSITE ASSESSMENT
CERTIFICATION

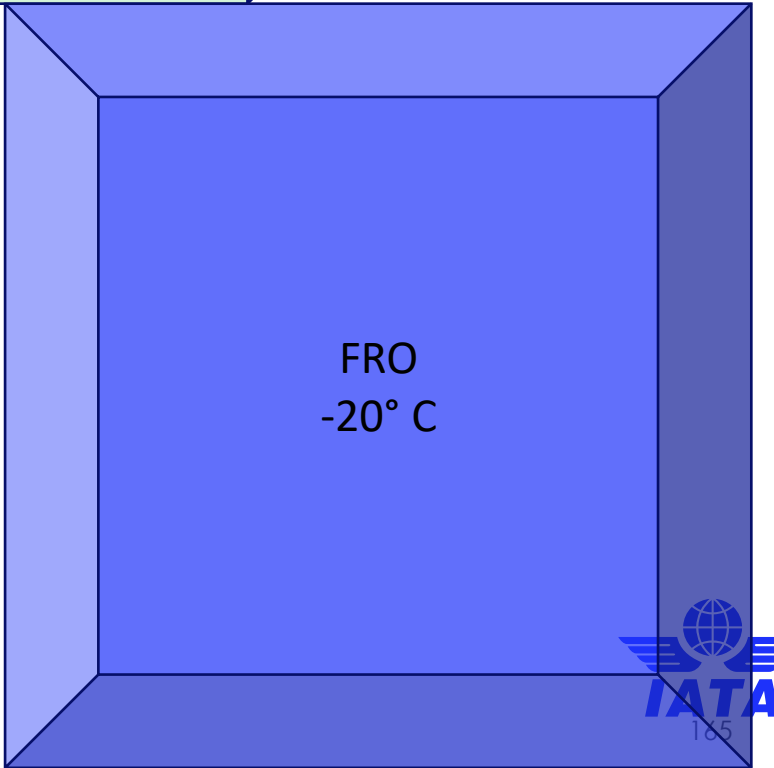
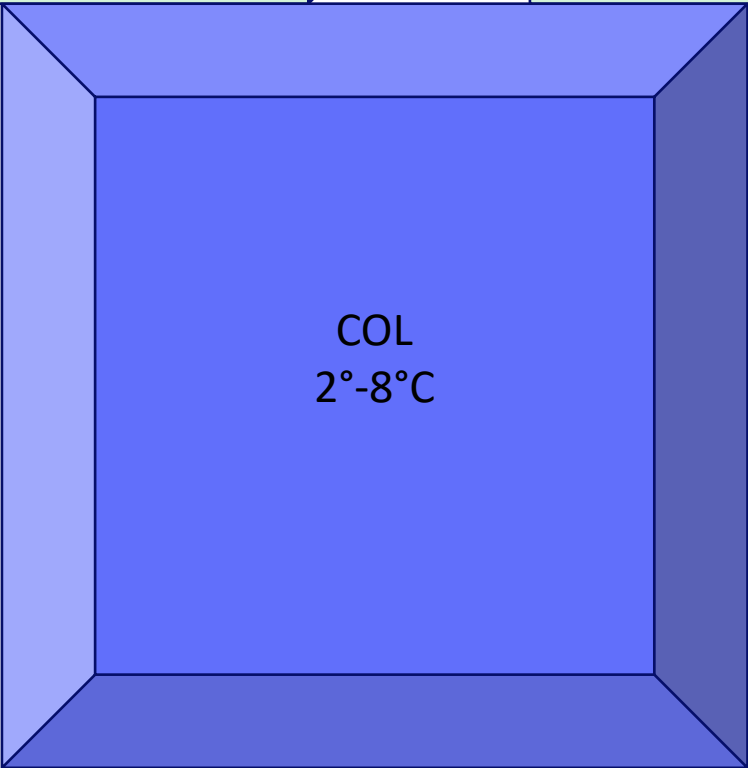
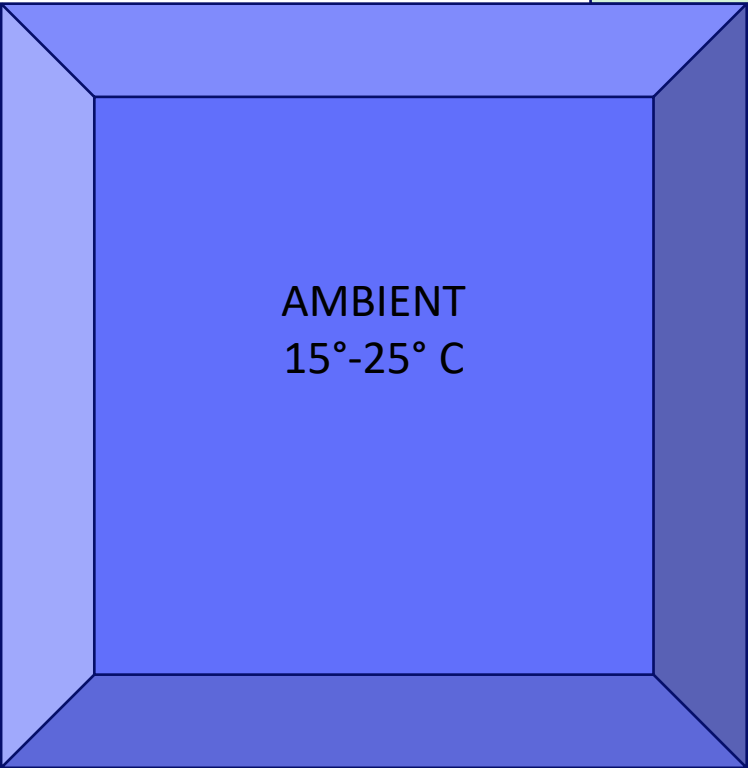
FACILITY UPGRADE AND
INFRASTRUCTURAL
IMPROVEMENTS

TRAINING AND INTERNAL
PROCESSES ALIGNMENT

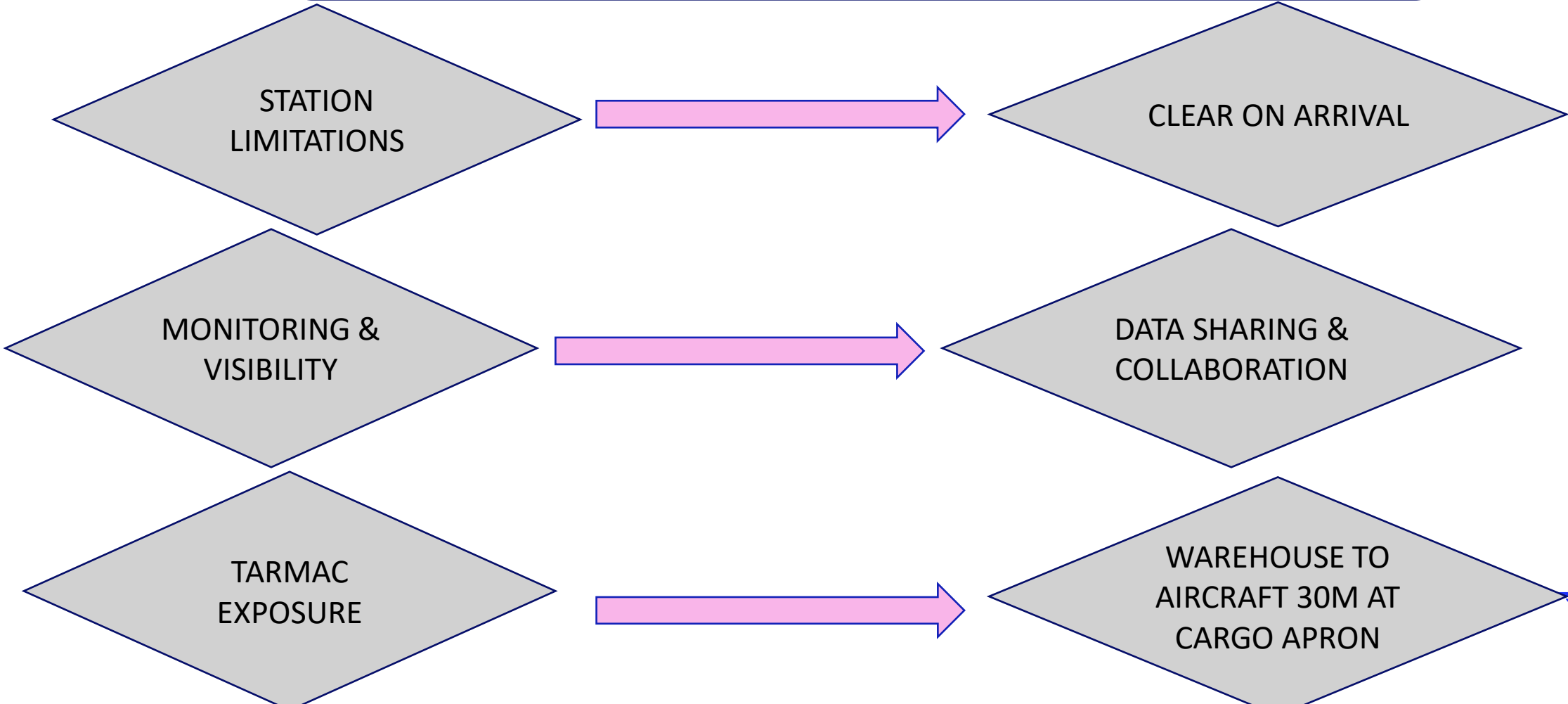
THE FACILITY.

Size 600 sqm2, Scalable

Deviation Monitors



CHALLENGES AND MITIGATION



SEAL OF APPROVAL

06TH APRIL 2023

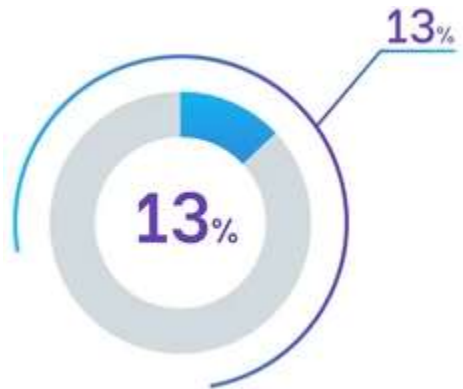


BENEFITS & GROWTH

INCREASE IN VOLUMES BY 13% IN THE 6-MONTH PERIOD AFTER

PARTNERSHIP WITH KEY LOGISTICS MOVERS.

OPERATIONAL EFFICIENCY



INCREASED MOVEMENT FROM NEW MARKETS THROUGH OUR CDG, AMS AND LHR GATEWAYS.

INCREASE IN VOLUMES TO NEW MARKETS IN AFRICA

INVESTMENT IN NEW FREIGHTERS TO IMPROVE CONNECTIVITY

CONTINUOUS IMPROVEMENT....

One Source

*Get all details of
our validated
capabilities on
IATA One Source.*



Thank You

Air Cargo and Sustainability



Andre Majeres

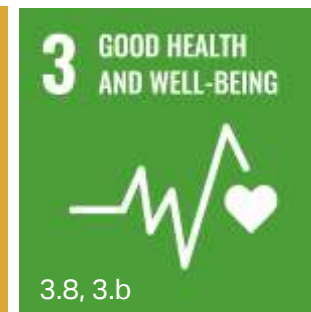
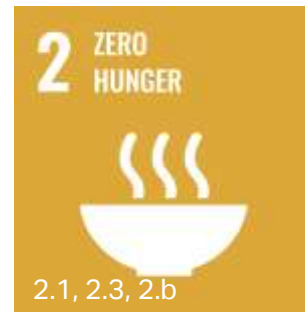
Head of eCommerce and Cargo Operations, IATA

Air cargo sustainability contribution



Air cargo is a key driver toward the achievement of the UN Agenda 2030 Sustainable Development Goals (SDGs)

The industry directly contributes to meeting the targets of **seven** of the goals



What is driving sustainable transformation?



Regulatory requirements



Customer & social demands



Technological innovation



Industry initiatives

No longer a “nice to have”

The industry is speeding up its efforts to address demands, but there is an overwhelming and scattered number of initiatives tackling different aspects of sustainability.

Airlines

Sustainability has become a strategic priority.

Airports

Have increased their resources on environment and sustainability.

Ground & Cargo Handlers

Are aware of the need to prioritize environment and sustainability.
Currently looking for the best option to approach the topic.

Freight Forwarders

Seeking to reduce their operational impact on the environment and to attract new customers by thinking greener.

Our priorities for Cargo Sustainability



Contributing to key industry commitments to achieve net zero emissions by 2050


CO2 Emissions Measurement & CO2 Connect



Reducing perishable loss along the supply chain



Reducing plastic waste in air cargo operations and enabling circular economy practices



Driving sustainability and efficiency in cargo handling & operations

IATA Environmental Assessment (IEnvA)

**Contributing to key industry
commitments to achieve net
zero emissions by 2050**



Objective Net Zero 2050



Target aligned with Paris Agreement goal to keep global warming under 1.5 °C

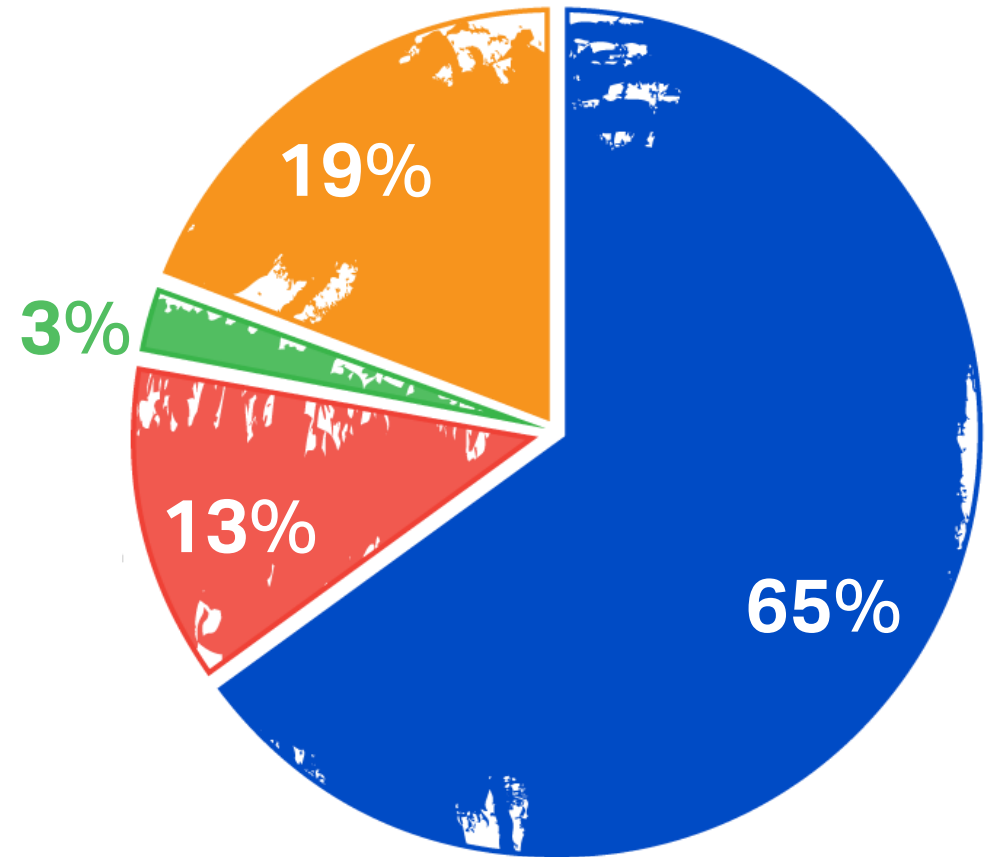
If Business-as-Usual in 2050

+10b
passengers

1.8
Gigatons of CO₂
to abate

Industry plan for net zero

- 65%** Sustainable Aviation Fuels (SAF)
- 13%** New technologies
- 3%** Operations & infrastructure
- 19%** Carbon capture and offsetting



Objective Net Zero 2050

Sustainable Aviation Fuel

Production needs to increase from 100 million liters today to at least 449 billion liters in 2050

New technologies

Electric, hybrid and hydrogen propulsion will play a role. New types of planes could come into service in 2030's and 2040s.

Operations & Infrastructure

Lightweight ULDs, aircraft retrofitting, fuel efficiency management systems, reduced engine taxiing, air traffic management programs

Carbon capture and offsetting

Quality Carbon Capture, Utilization and Storage (CCUS) removes carbon from the atmosphere and could be used for SAF production.



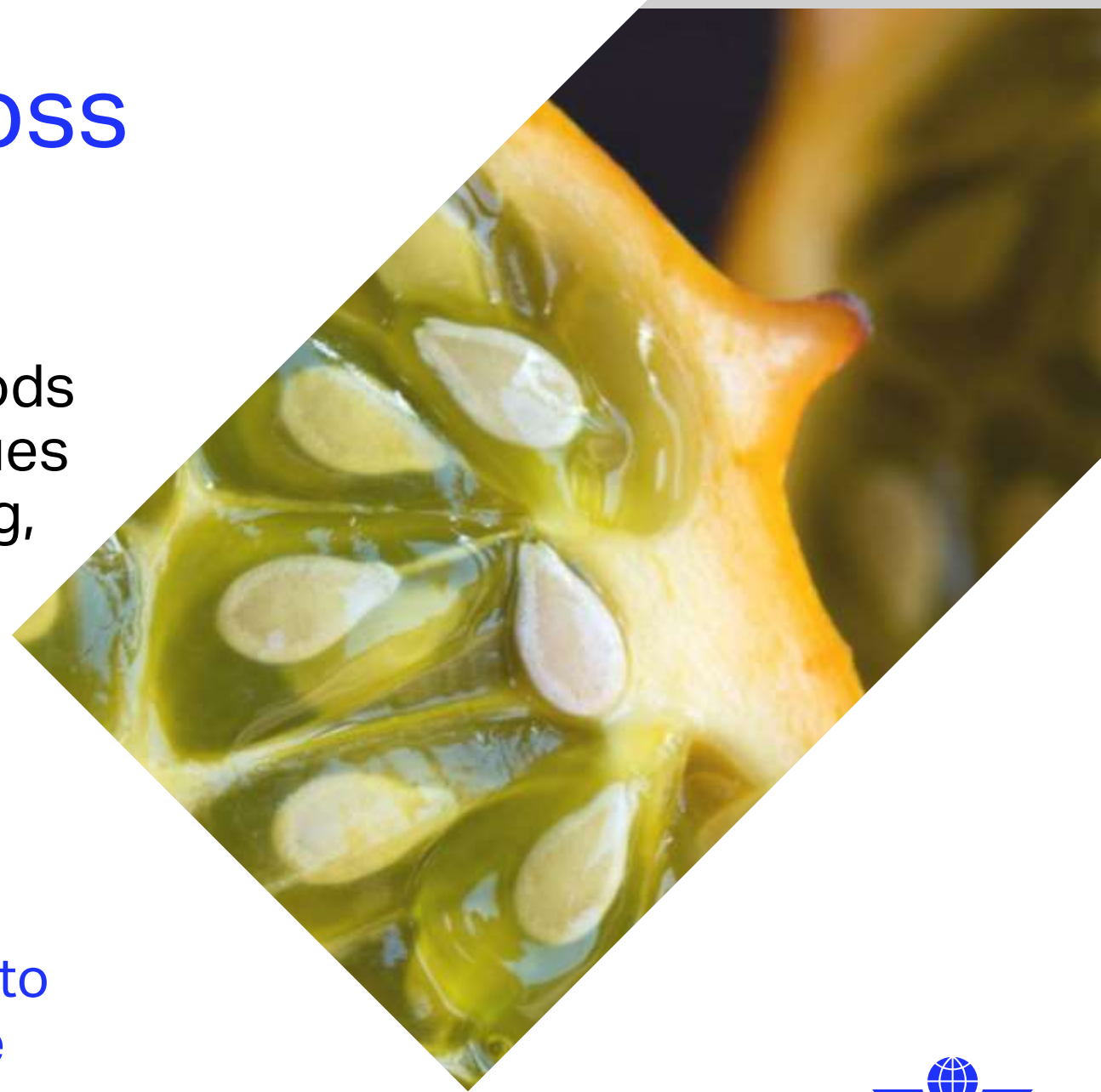
**Reducing perishable loss
along the supply chain**

Reducing perishable loss along the supply chain

Perishable loss occurs before the goods reach the consumer as a result of issues in the production, **storage**, processing, and **distribution** phases.

Globally, around **14 percent** of food produced is lost between harvest and retail.

Our objective: contribute to creating economic growth through global access to perishables while reducing loss along the supply chain.



Innovating to achieve zero loss

Creating innovative solutions to prevent perishable loss and find alternatives for use and disposal of waste is critical to achieve our sustainable development targets.



**Reducing plastic waste
in air cargo operations
and enabling circular
economy practices**



Reducing plastic waste in cargo operations

The air cargo industry works to reduce SUP usage.

- Explore the use of biodegradable plastics in operations and regulatory challenges
- New reusable covers for cargo
- Research on alternative materials for netting & spreading
- Recycle and repurpose ULD components

Reduce

Reuse

Replace

Recycle

12,500 tons

of plastic used by air
cargo per year

1.25 billion

'water bottles' each year

An aerial, top-down view of an airport tarmac, tinted in a monochromatic reddish-orange hue. Three large commercial aircraft are parked at gates, each with its own set of ground support equipment (GSE) including stairs, belt loaders, and other service vehicles. The tarmac is marked with various lines and numbers. In the background, there are several long, narrow buildings, likely hangars or cargo processing facilities, and a large parking lot filled with cars and trucks. The overall scene depicts a busy airport environment focused on cargo handling and operations.

Driving sustainability and efficiency in cargo handling & operations

Cargo Facility of the Future vision

The cargo facility of the future will be safe and secure, **green**, automated, connected and smart.

This will ensure it is fit for purpose in size, location and for the people who use it.



Six technology trends revolutionizing air cargo facilities



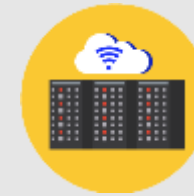
Augmented reality and wearables



Drones and autonomous vehicles



Robotics and automated systems



Big data / predictive AI / deep learning



IOT, connected cargo and devices



Green, sustainable, net zero buildings

IATA Environmental Assessment (IEnvA)

- ✓ **Environmental Management System Standard** for aviation
- ✓ Based on **IOSA & ISO14001 Standards**
- ✓ **External Assessment** and registration program
- ✓ **Oversight** by members



IEnvA in numbers

www.iata.org/ienva



56

Subscribed organizations

+ many in the pipeline

580+

Course participants

From Oct 2022

300%

Membership growth/ year

During 2021 and 2022

70+

External assessments

With IEnvA Lead Assessors

Developed for aviation



Airlines



Airports



Cargo



Ground
Handlers



Freight
Forwarders

Thank You

ONE Source: <https://onesource.iata.org>



Andre MAJERES

Head of eCommerce, Cargo & Mail Operations

majeres@iata.org



Products and Trainings



Caroline Karanja

Manager Industry Solutions - AME, IATA

Air Cargo Day

Train with the
best





- **IATA courses are designed by the industry for the industry**
- **IATA Training is the gateway to a successful career in aviation**
- **96% of participants say that our instructors are experts in their field**
- **IATA Training qualifications are internationally recognized**
- **In 2023, over 3K students trained and upskilled on Cargo and Logistics Standards**





Self-study courses



- Self-study puts you in control
- Study at your own pace and create the right habits for career success

Classroom Training



- Classroom courses don't just teach about the industry, they lead it forward
- Get the personal touch from instructor-led courses

In-house Training



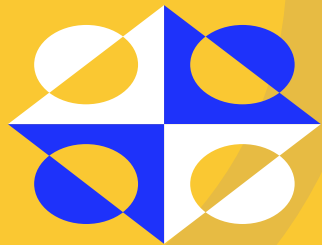
- In-house courses provide a high-value, intensive environment
- The best option to train larger groups internally and address concerns for your own organization

Get Trained on Preloading Advance Cargo Information (PLACI)



Why

- Understand cargo business processes and stakeholder interactions for greater efficiency.
- Ensure precision in Cargo-XML electronic message structure, including specifications, fields, code lists, and layouts.
- Implement Cargo-XML messaging and achieve compliance with customs' preload advance cargo information (PLACI) and e-cargo initiatives.
- Improve data quality management within your organization, leading to smoother operations.



Who

- E-Cargo project managers
- IT implementation managers and service providers
- Data quality managers
- Technology managers from customs or border protection authorities



When

- Singapore, Singapore (IATA), 25 - 27 March 2024
- Switzerland, Geneva (IATA), 22 - 24 July 2024
- United States, Miami (IATA, ACCET Accredited), 16 - 18 December 2024



Get Trained on Special Cargo Standards

Temperature Control Regulations



- [CEIV Pharma Refresher](#)
- [Temperature Controlled Cargo Operations](#)
- [Temperature-Controlled Container Operations](#)
- [Audit, Quality and Risk Management for Temperature Controlled Cargo](#)

Perishable Control Regulations

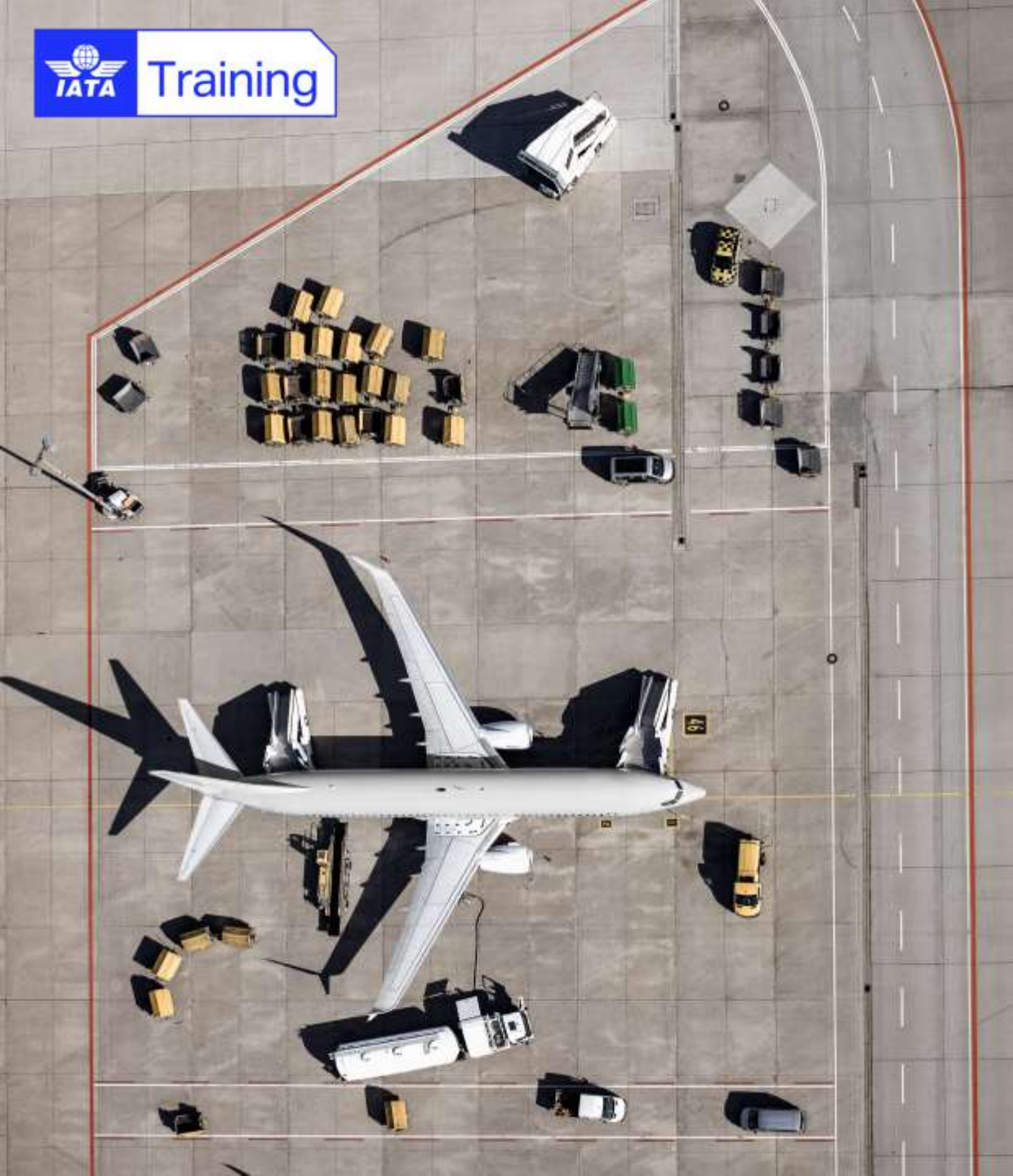


- [Perishable Cargo Transportation](#)
- [Perishable Cargo Logistics Management](#)
- [CEIV Fresh Refresher course for Key Personnel](#)

Live Animal Regulations



- [CEIV Live Animals Refresher](#)
- [Live Animals Transportation](#)
- [Live Animals Cargo Logistics Management](#)
- [Live Animals Regulations \(LAR\) course with LAR Manual \(partner-taught or self-study\)](#)



You will greatly enhance your knowledge of the complex methods and procedures applied in the global air cargo industry. You will acquire solid cargo knowledge, helping you and your company to face the challenges of your highly competitive working environment.

This course is designed to provide comprehensive training for personnel involved in Unit Load Device (ULD) operations. You will be well-equipped with the necessary knowledge and skills to effectively carry out your responsibilities in ULD operations.

This course will provide you with the necessary tools and techniques to complete a professional cargo accident investigation process taking into account both the process and the human factor involved. The course follows a model similar to accident investigation and is based on the ICAO Annex.

This course provides an overview of the Lean Six Sigma concept and how it can be applied to the Air Cargo and Logistics industries. It will give you insight into the tools and techniques applied in the methodology, as well as analysis and application of the DMAIC cycle.

CARGOIS

Available online & via
Data Feeds

The Air Cargo Market Intelligence leader providing a **reliable snapshot of market dynamics** (Tonnage, Yields, Commodity and Service information) Sourcing its data from Airway Bills settled through **CASS & Contributed Direct Data.**

Benefits

Develop your business
Develop your network
Increase your revenues

Key Input for

Market Strategy
Account Management
Sales & Procurement
Performance Management

For: Airlines, GSAs, Freight Forwarders, Shippers, GHA, Airports and Aircraft manufacturers

200 Bn+ Kgs

Weight Transported

24 M

Airway bills captured

100K+

Unique Trade-lanes

28+

Direct Data Contributor



DG AutoCheck

Available online
with API connection

A digital solution that enables you to **automatically validate** a Shipper's Declaration for Dangerous Goods (**DGD**) against each relevant provision in the IATA Dangerous Goods Regulations (**DGR**).

Benefits

- Improves Safety
- Improves Speed & Accuracy
- Improves Time management
- Improves Quality of acceptance checks
- Reduces compliance-related errors and cost
- Provides business intelligence data

For: Airlines, Ground handlers, Freight Forwarders

35+
Customers

300,000+
Acceptance checks
performed

50%+
Time saving

FIND OUT MORE



Caroline Karanja
Manager Industry
Solutions
karaniac@iata.org



Mohamad El Diab
Senior Manager
Industry Solutions
eldiabm@iata.org

Visit:
[iata.org/dg-
autocheck](https://iata.org/dg-autocheck)
iata.org/cargois

Closing Remarks



Alex Stancu

Area Manager – Southeast Africa – AME, IATA

IATA Air Cargo Day Africa- Day2



Johannesburg, South Africa

8-9 November 2023

swissport



AIRLINES ASSOCIATION OF SOUTHERN AFRICA



Opening and Introduction



Alex Stancu

Area Manager – Southeast Africa – AME, IATA



AIRLINES ASSOCIATION OF SOUTHERN AFRICA



Thank you to our Sponsors



Welcome & Set the Scene – Focus on Africa



Sandile Chipunza

Manager External Affairs and Sustainability – AME, IATA

IATA Competition Law Compliance

- Participants are cautioned that any discussion regarding matters such as fares, charges, division or sharing of traffic or revenues, or concerning any other competitively sensitive topics outside the scope of the agenda is strictly prohibited.
- As a result, questions pertaining to individual policies or commercial decisions and/or being subject to bilateral commercial discussions between airlines and their suppliers or customers will not be answered.



Agenda – Day 2

Digitalization

- Opening Keynote
- Embracing ONE Record
- IoT in Air Cargo
- Warehouse Innovation
- Cargo Distribution with ONE Record
- Pre-Loading Advanced Cargo Information (PLACI)
- Digital Ecosystem
- ONE Record implementation – Roadmap
- Inspiring Innovation



Focus Africa Spotlight Session



Sandile Chipunza - Manager External Affairs & Sustainability Africa

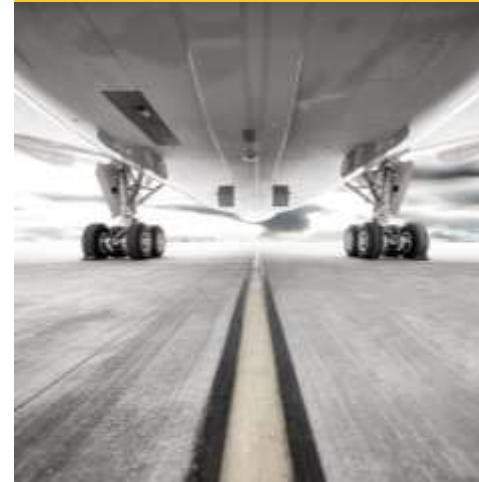
Agenda

- Outlook
- Africa's Opportunities
- Challenges
- Focus Africa
- Q&A



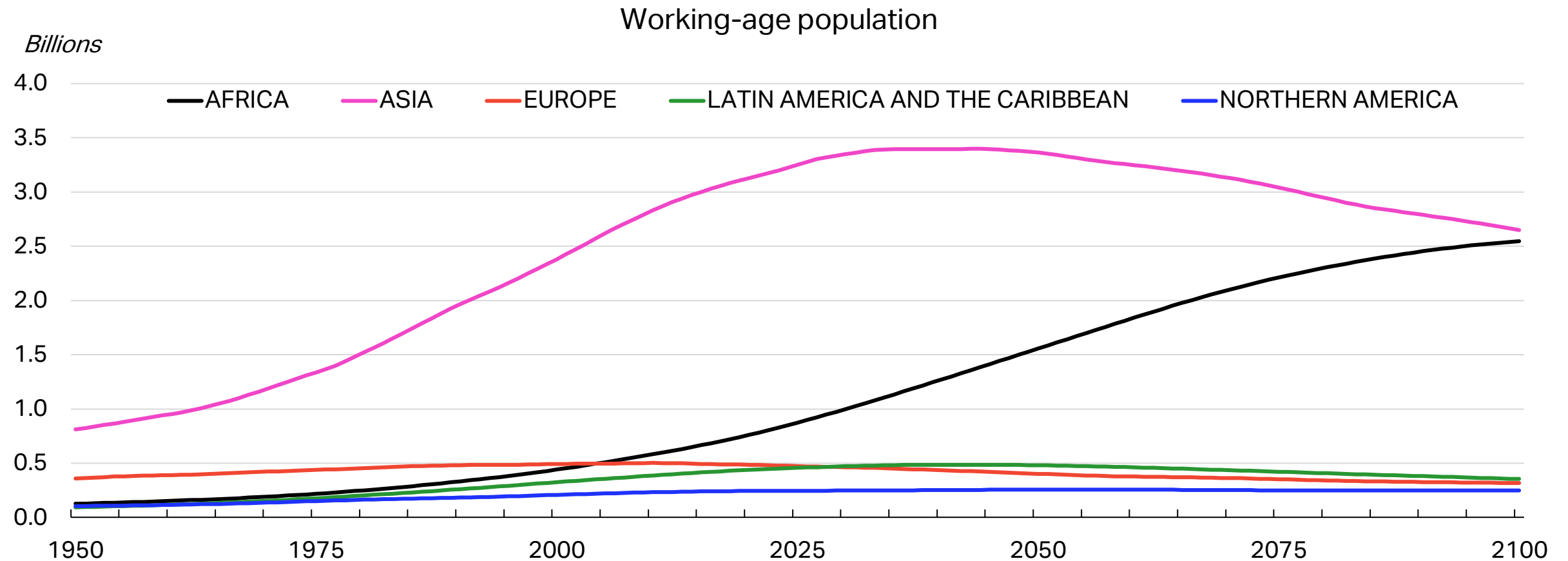
2.1%
Africa's % of
global aviation

2024
African
airlines return
to profitability



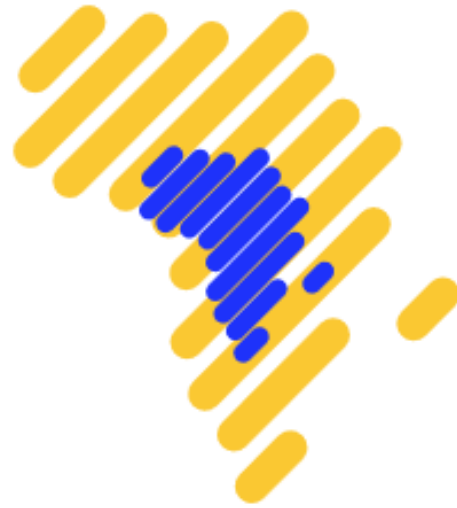
\$3.5bn
African airline
losses:
2020-22

Africa will be leading the growth in the working-age population in the 21st century



Growth potential in Africa's aviation sector is undeniable – 2035 projections

7.7 million
jobs



\$63bn
GDP

260+ million passengers by 2035

Challenges

- Infrastructure constraints
- High costs
- Lack of connectivity
- Safety
- Access to secure and cost-efficient financial services
- Blocked funds



Challenge: Infrastructure

Air transport infrastructure pillar ranking

Western Africa	Global rank 2019	Global rank 2021
Cape Verde	57	77
Ghana	93	88
Benin	111	96
Senegal	82	80
Côte d'Ivoire	94	87
Nigeria	89	76
Cameroon	108	112
Sierra Leone	115	115
Mali	103	100
Chad	114	114

Southern Africa	Global rank 2019	Global rank 2021
South Africa	47	43
Botswana	112	110
Zambia	84	95
Lesotho	102	101

Northern Africa	Global rank 2019	Global Rank 2021
Egypt	41	32
Morocco	51	50
Tunisia	74	83
Algeria	41	32

Eastern Africa	Global rank 2019	Global rank 2021
Mauritius	39	61
Kenya	67	57
Tanzania	81	71
Rwanda	99	91
Malawi	113	113

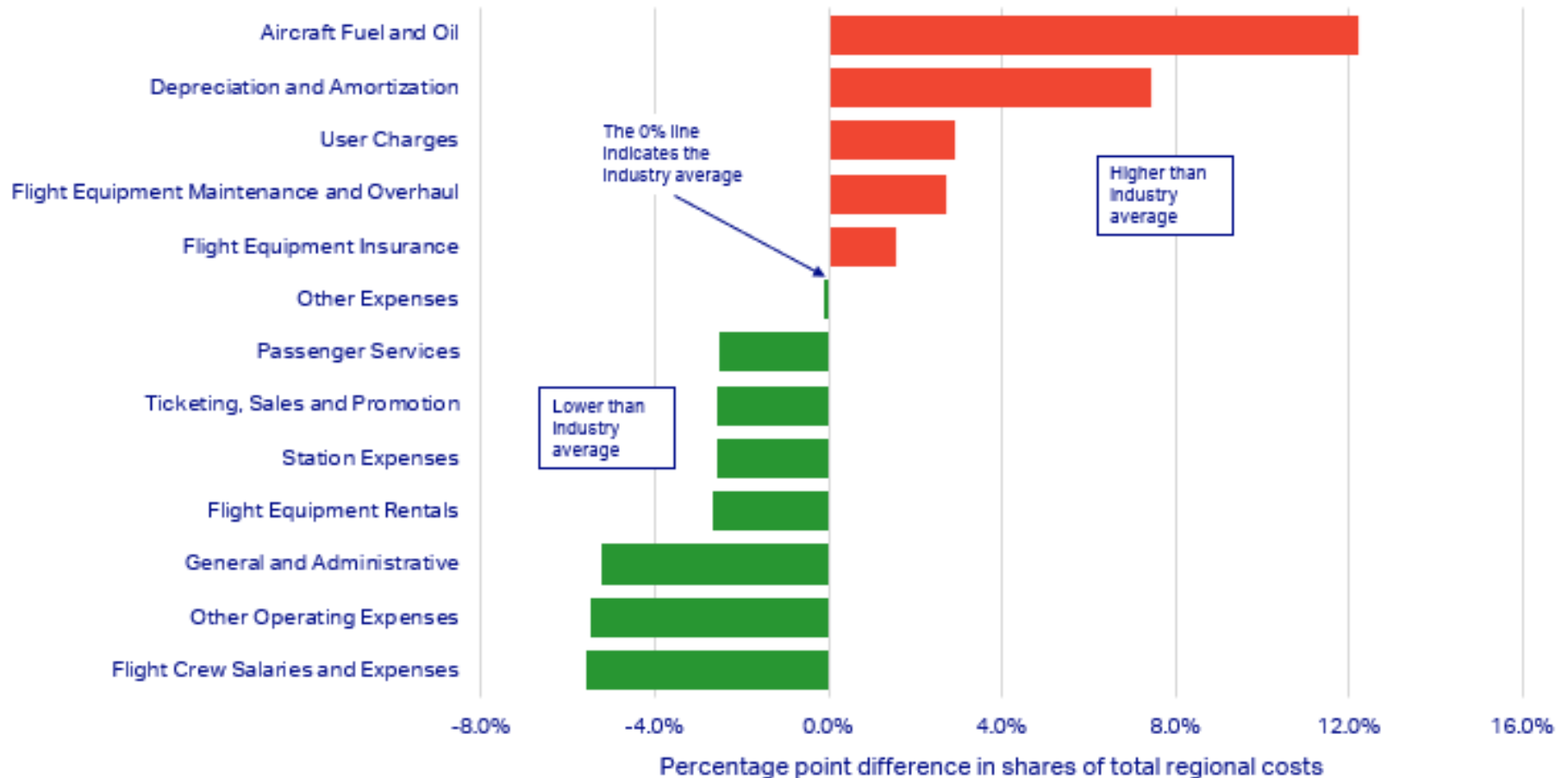
The World Economic Forum's Travel and Tourism Competitiveness Report assesses the set of factors and policies that enable the sustainable development of the Travel and Tourism sector, which in turn contributes to the development and competitiveness of a country.



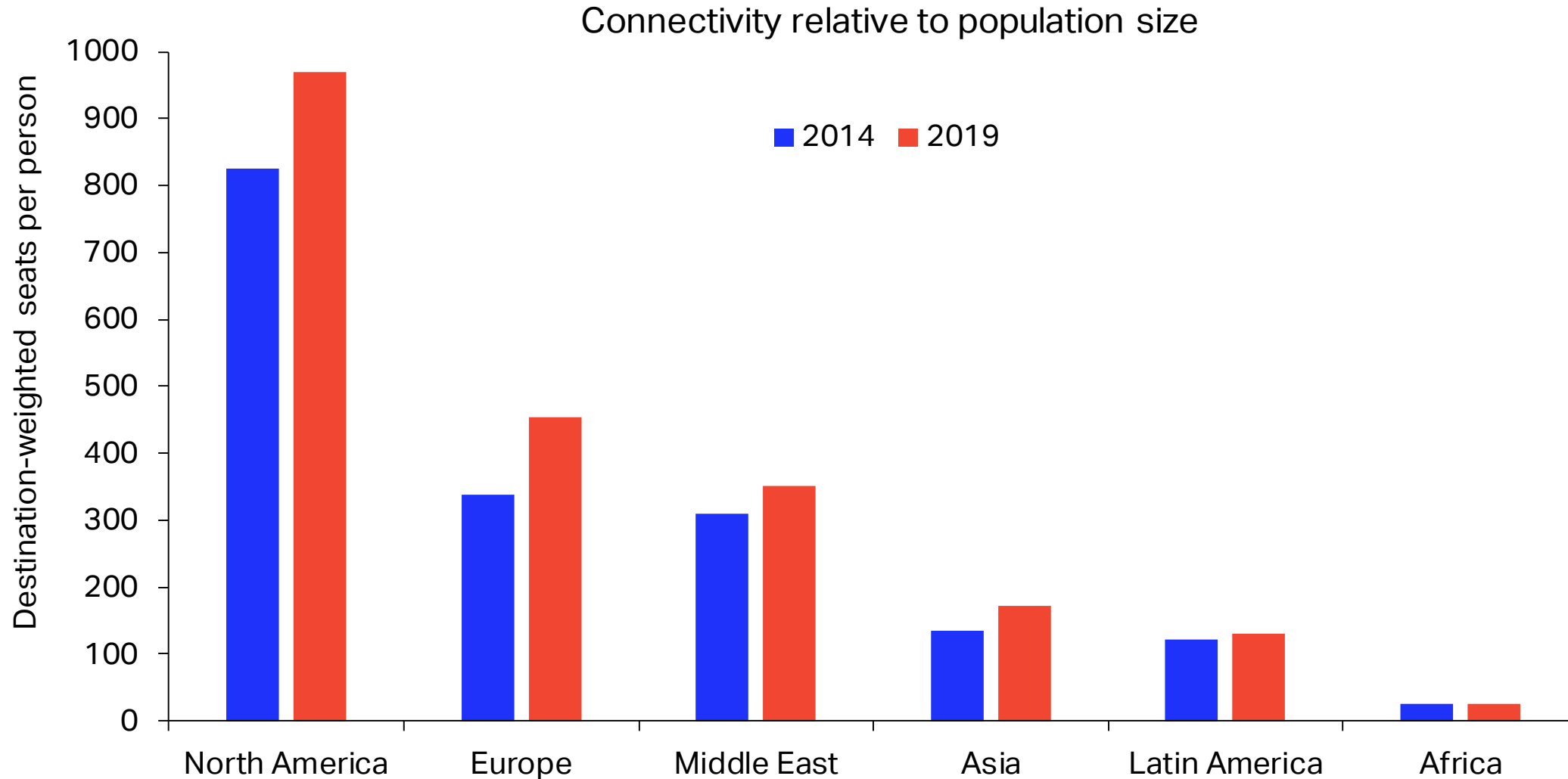
Challenge: High Costs

In 2021, African carriers had excessive costs in several areas

Differences in cost sources: Africa vs. Industry



Challenge: Connectivity in Africa is limited



Challenges: Safety

Governments need to step up:

Implementation of ICAO Standards for safety needs to be improved:

- 21 States in Africa remain below the Effective Implementation (EI) of State Safety Programs

Opportunities with:

- Communication, Navigation, Surveillance (CNS)
- Aeronautical Information
- ATM
- Data-sharing

Challenges: Blocked Funds

Blocked funds:

- 2.33 billion Blocked Globally
- 1.69 billion total amount of blocked funds in Africa in Aug
- 73% of all blocked funds are in Africa

Opportunities with:

Improving access to international settlement systems for more rapid cash flow support and modernization of aviation across the continent

Focus Africa Priority Areas

- **Safety:** Improve operational safety through a data driven, collaborative program to reduce safety incidents and accidents, in the air and on the ground.
- **Infrastructure:** Facilitate the growth of efficient, secure, and cost-effective aviation infrastructure.
- **Connectivity:** Promote the liberalization of intra-African market access through the Single African Air Transport Market (SAATM).
- **Finance and Distribution:** Accelerate the implementation of secure, effective and cost-efficient financial services and adoption of modern retailing standards.
- **Sustainability:** Assist Africa's air transport industry to achieve the "Net Zero by 2050" emissions targets agreed to by industry and the UN's International Civil Aviation Organisation (ICAO).
- **Future Skills:** Promote aviation-related career paths and ensure a steady supply of diverse and suitably skilled talent to meet the industry's future needs.

Example Focus Africa Initiatives:



Safety: CASIP – A Program Built for Africa

A Partnership Program

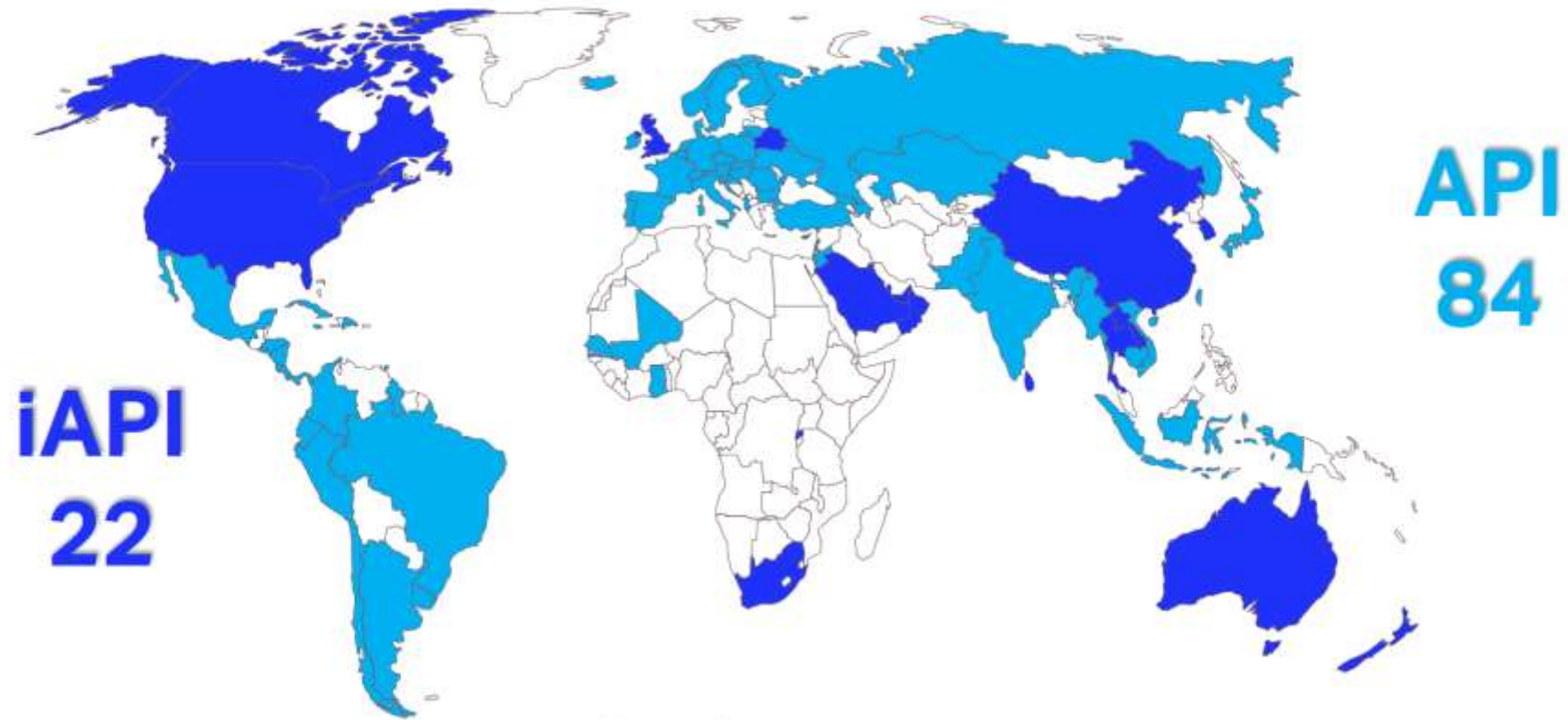
Bringing together the expertise of global aviation specialists invested in working under a framework of trust, cooperation and collaboration to deliver safety improvement across the continent of Africa bringing Africa to within the Global Safety Standards

CASIP Objectives

- Reducing the accident and serious incident rate across the continent of Africa
- Improving operational safety performance through identifying deficiencies and implementing corrective action plans
- Provision of Safety training and workshops continent wide
- Ensuring the value of aviation and relatedness to airline safety, flight operations, regional connectivity, and operational and environment efficiency is fully understood
- Delivering a data driven approach to achieve safety improvement, enriching the region with available safety data, fostering information sharing, and assuring timely reporting of accident and incidents

Infrastructure

Global API / iAPI Implementation Status



API: 73 UN States – 11 Territories
iAPI: 20 UN States – 2 Territories

Legend

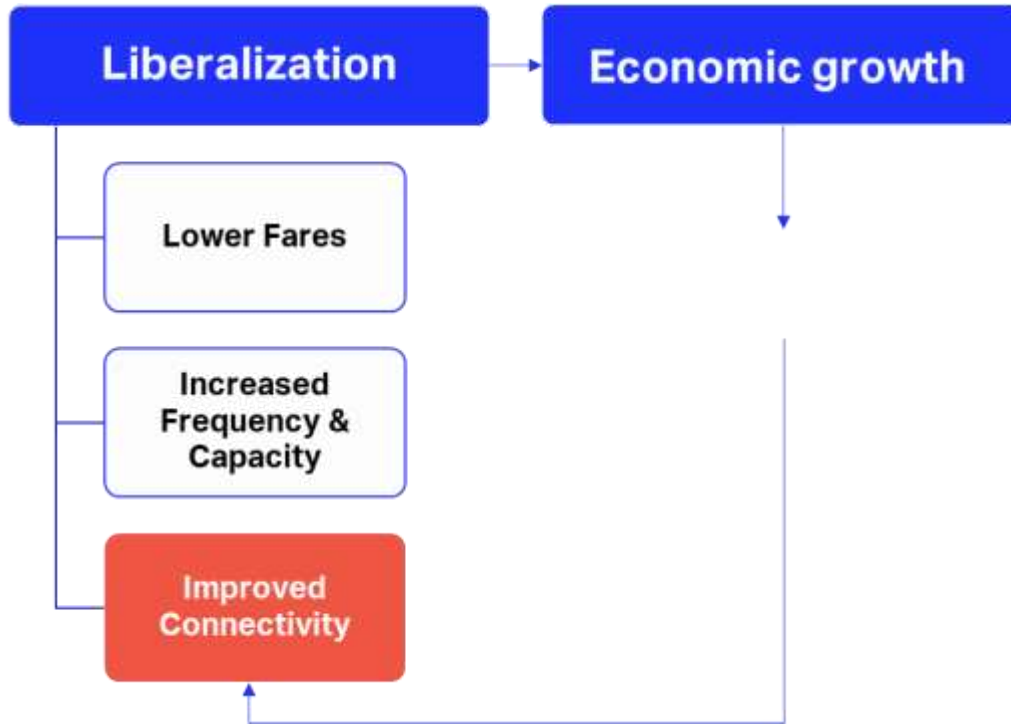
- iAPI in force (total: 22)
- API in force (total: 84)

14 November 2023

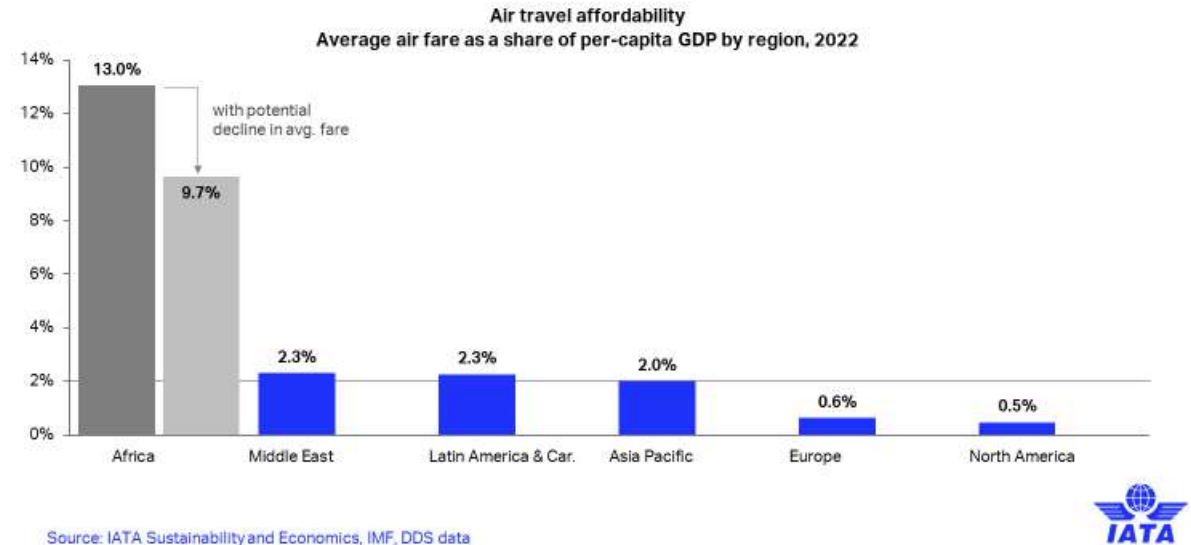
Source: IATA API PNR World Tracker



Connectivity



Air travel affordability remains a challenge in Africa



There are three major showstoppers for more connectivity in Africa:

- **Affordability** (high fares due to high costs of operations)
- **Protectionism** (Air Services Agreements not being observed in their full letter & spirit, this includes the effective deployment of SAATM by signatory states)
- **Travel impediments** (Visa fees and processing inefficiencies, Travel documents, Forex rate fluctuations and shortages, Tourism Infrastructures,)

Assess readiness of countries & support their effort to deploy open sky in collaboration with key Stakeholders

Sustainability

Jet A1 is 12% more expensive in Africa compared to the world average price.

Fuel represents 40% of airlines' cost in Africa.

SAF is both an opportunity and challenge for the Continent.

Need for cooperation for capacity build up between countries – producers – distributors.

•Level-up knowledge and resources on sustainability

The level up initiative is designed to support airlines in Africa on their journey to net-zero, sustainable aviation. It provides unique access to resources and seeks to support airlines develop reduction programs in line with the industry's 2050 CO2 emissions strategy.

•Work with partners to secure airlines' access to sustainable finance

The continued importance of sustainability for aviation will accelerate the requirement for capital to develop new technologies, infrastructure, and fuels. Green Finance will play a huge role in driving these industry initiatives forward, ensuring that projects are properly financed, measured, and accounted for, and providing a supportive investment framework. This initiative seeks to enhance African Airlines' access to sustainable finance institutions and unify airline sustainability metrics that impact access to capital.

•Encourage countries in Africa to increase SAF production and explore development opportunities

Sustainable Aviation Fuel has been identified as one of the key elements in helping achieve the industry's net zero 2050 carbon goal. This initiative aims to engage with a wide range of industry and policy stakeholders on all SAF topics and facilitate cooperation and promote partnerships between them. Focus areas include providing policy support for the commercialization of SAF and removing barriers to the realization of a cost competitive SAF.

Finance and Distribution: New ISS Operations

Expanding IATA settlement systems coverage and increasing IATA's relevance in AFI

- **Sierra Leone BSP:** Go Live 1 Aug 2023
- **Ivory Coast CASS :** Go Live 15 July 2023
- **Ghana CASS :** Go Live 15 July 2023
- **South Sudan/ Somalia BSP**
- **Ethiopia and Malawi BSP USD**



Future Skills - Caroline

We Encourage you all to visit her Desk for more on this...

An aerial, top-down view of a large commercial airplane, likely a Boeing 777, on a tarmac. The aircraft is white with blue accents on the tail and wings. Two large red engines are visible under the wings. The tarmac is grey with yellow ground markings. The text 'Partnerships are critical' is overlaid in white on the left side of the image.

Partnerships
are critical

+ internal
support

Value of aviation in **Africa**

Jobs supported by aviation

7.7 million jobs

Total GDP supported by aviation

\$63 billion

Tourism catalytic GDP supported

\$44 billion

Annual passengers

115 million

% of global passenger traffic

2.1%

Annual air freight

1 million tonnes

Source: IATA / ATAG ABBB Report 2020

SUSTAINABLE DEVELOPMENT GOALS



Aviation contributes to UN SDG's Africa of lifting 50 million people out of poverty by 2030 and reducing poverty levels by two-thirds by 2050.

Thank you Q&A



Embracing ONE Record



David Sauv

Senior Manager Digital cargo, IATA

ONE Record

One step closer to digital cargo

David Sauv

Senior Manager, Digital Cargo, IATA

Embracing ONE Record: Implications and Opportunities for Air Cargo Operations

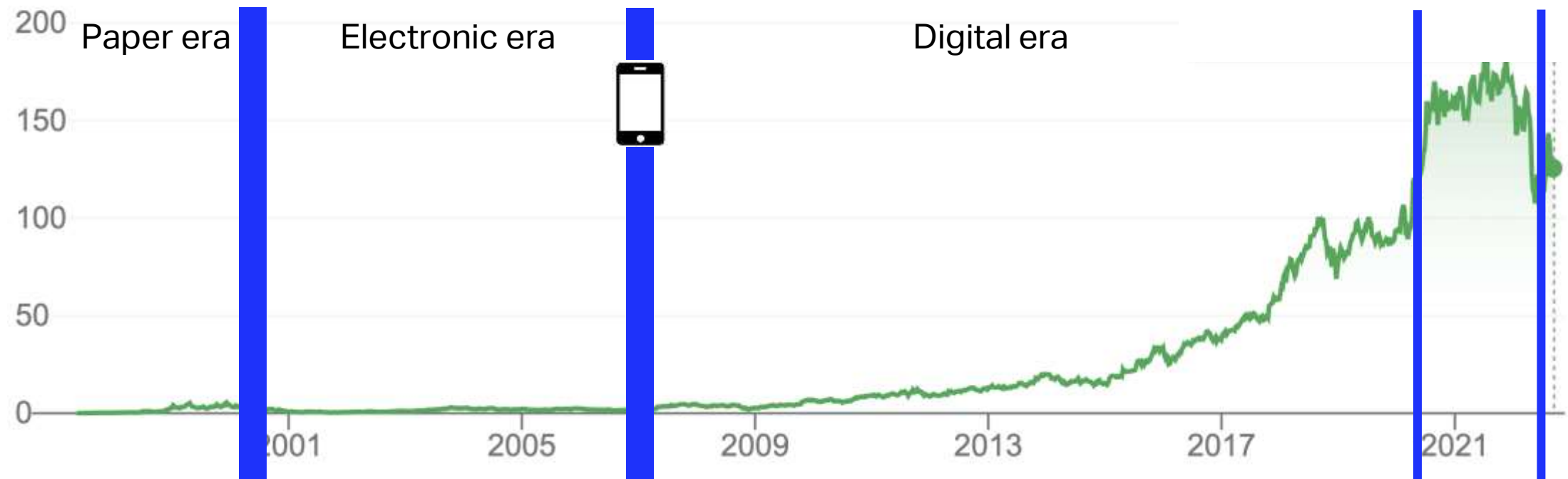


Digitalization ?



Digitalization of the global economy

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

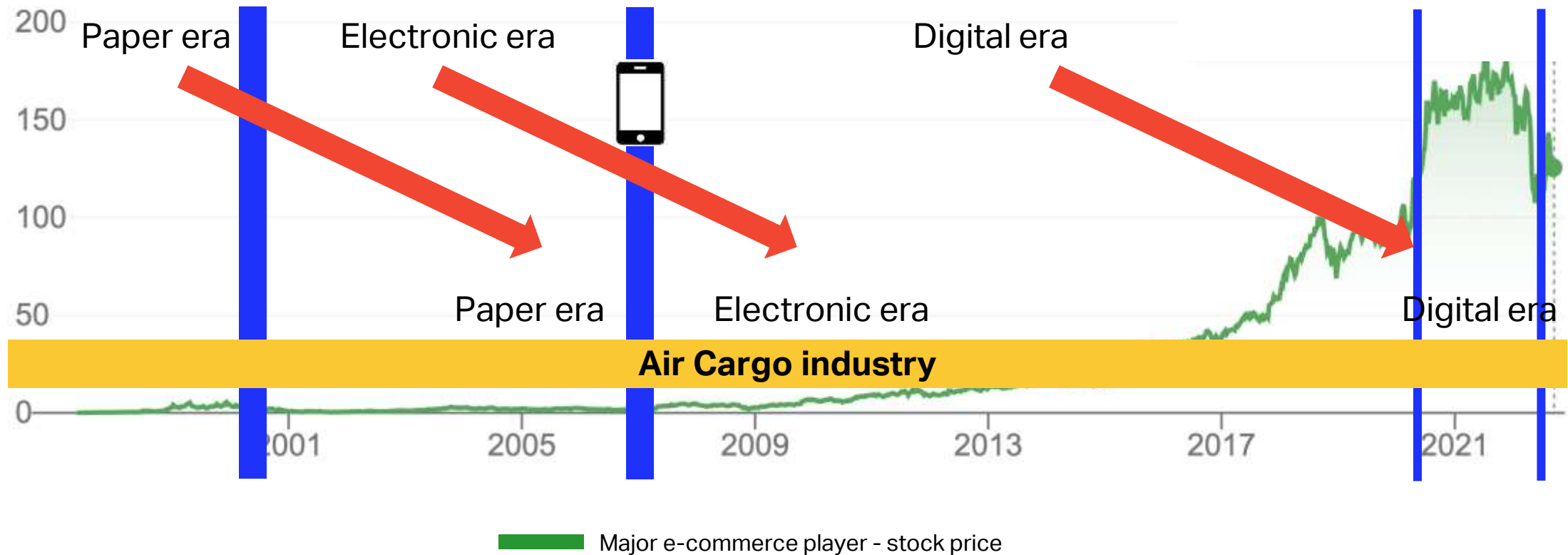


1) Oxford Economics

Major e-commerce player - stock price

Digitalization of the global economy

The air cargo has more than 15 years of lag in its digital transformation journey





What is going on in the Air Cargo industry?

**Each year, more than
7'800 tons of paper
documents are processed**

It's the equivalent of 80 Boeing
747 freighters filled with paper



The air cargo digital transformation journey

2005

2020

From paper to electronic

Cargo IMP / Cargo XML

Digitization

e-AWB: **~85%**

e-freight: **nonsignificant**

Avg shipping time: **5.5 days**

The industry needs to get rid of the documentary flow and leverage on data to speed up the cargo flow

2018

today

Transforming the industry through data

ONE Record / Interactive Cargo

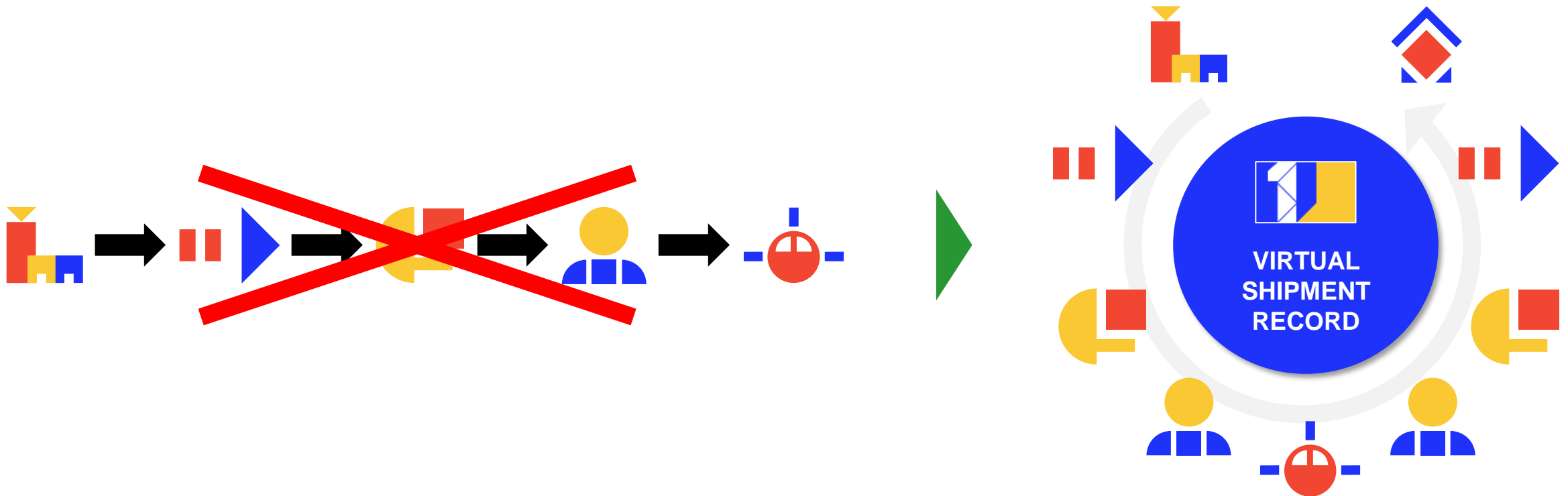
Digitalization / Digital Transformation

ONE Record Concept

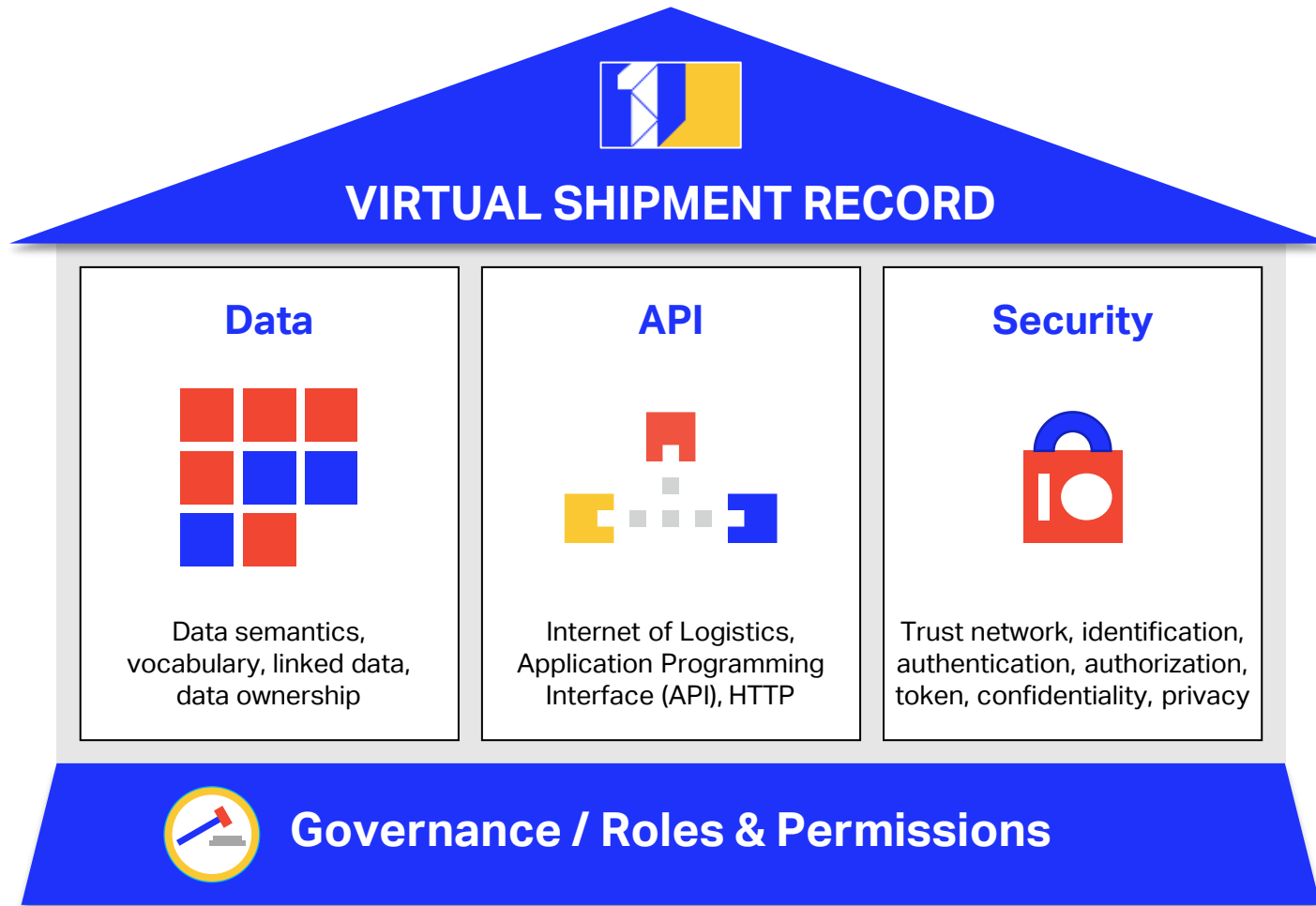


ONE Record concept

The essence of the ONE Record is to move from a peer-to-peer messaging model to a data sharing model relying on a Virtual Shipment Record



ONE Record concept



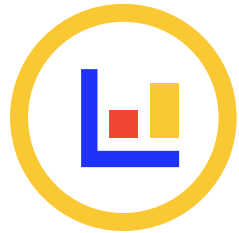
The ONE Record concept is based on 3 pillars enabling to define:

WHAT, HOW, with WHOM
data can be shared

ONE Record Data Model

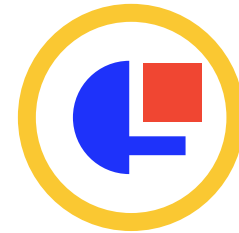


Design principles of the data model



Piece-centric

- Shift to piece-level management
- Piece is at the center of the model



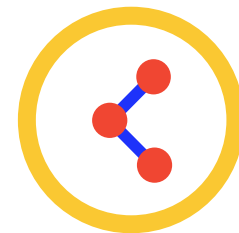
The digital twin concept

- Physical entities have digital twins in the model
- Easy understanding of the model and how object interact with each other



One single source of truth

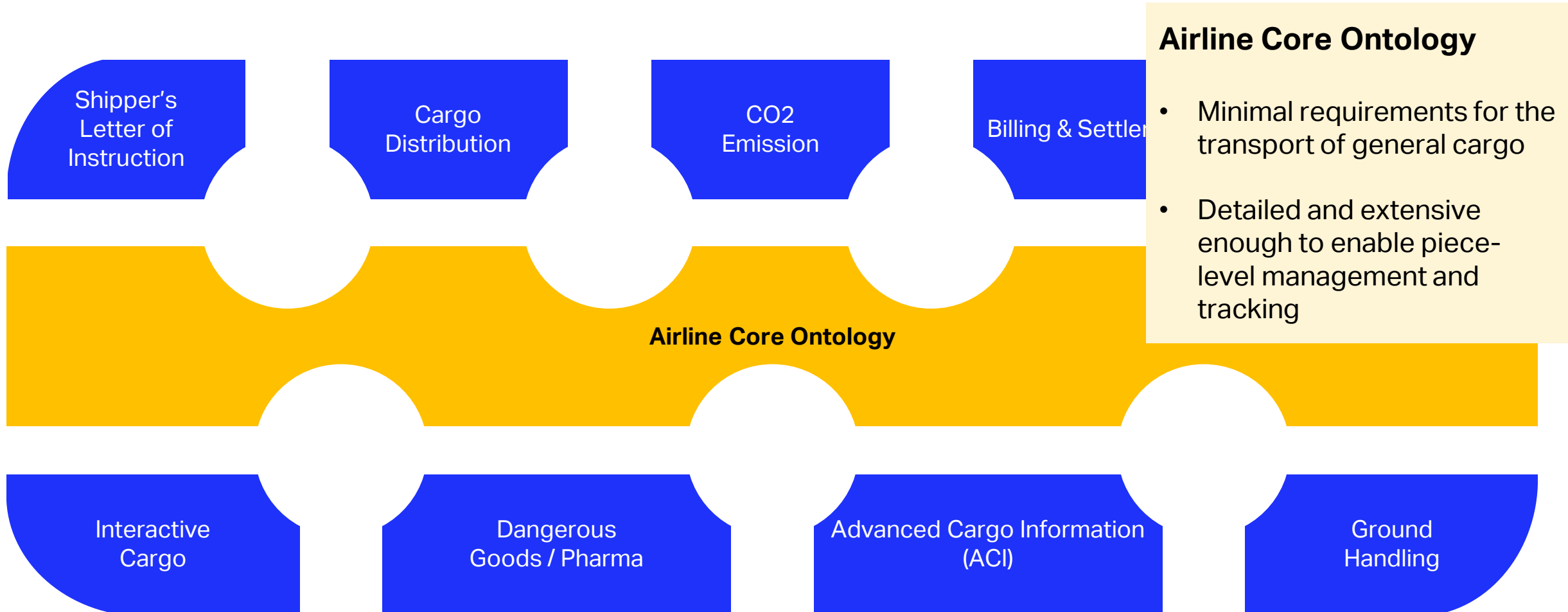
- Clear ownership of data that remains at its source, enhanced transparency
- Data quality and integrity



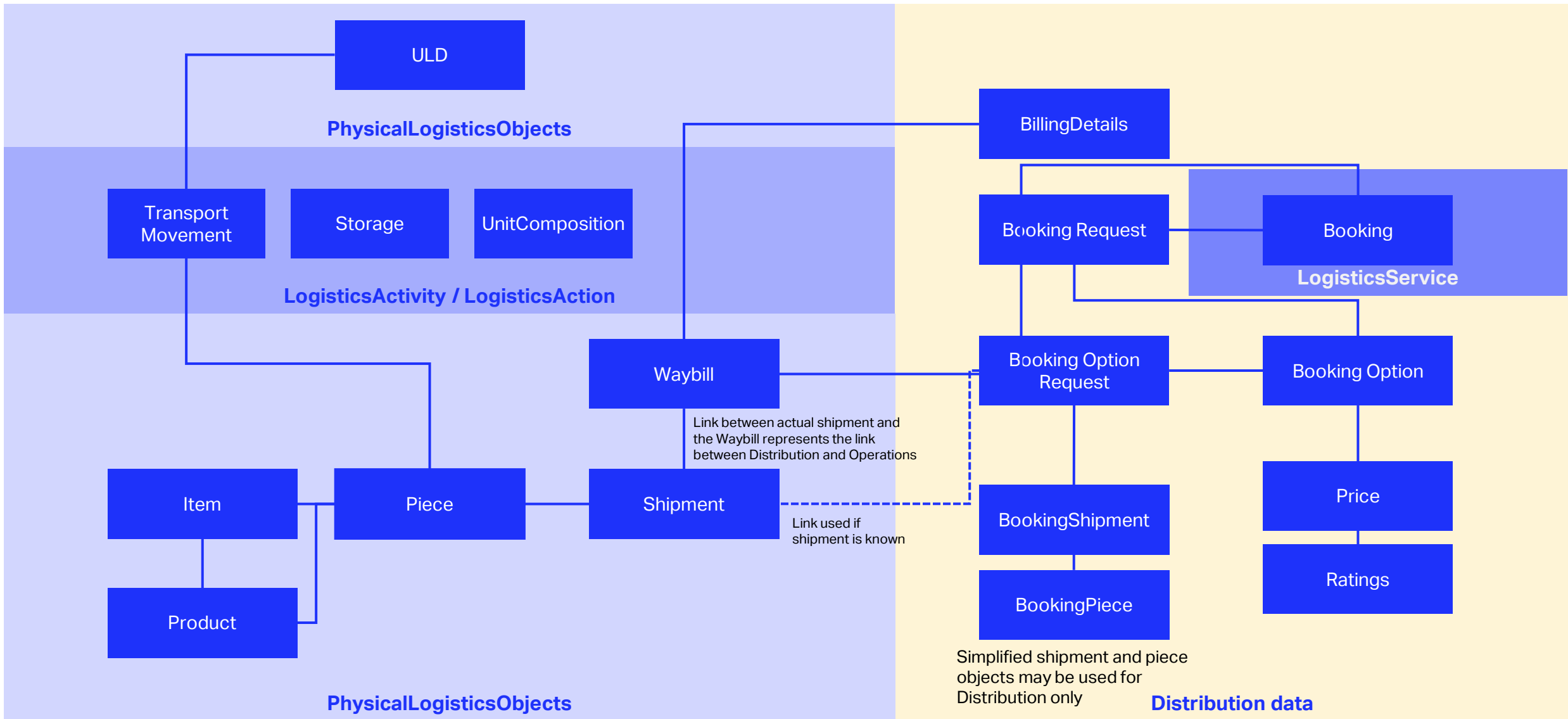
Data-centric

- **Data, not documents!**
- Use of Linked Data principles to avoid redundancy of data

ONE Record data model scope



Data Model high level overview



ONE Record

is a
data-centric model
and NOT a
**document-centric
model**

Provide better
visibility and
transparency



Eliminate
duplicate



Improve
data quality

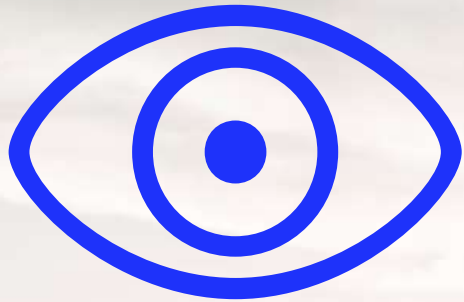


Industry Benefits





Data quality and control



Visibility and transparency



Plug & Play Connectivity



Future of digital cargo






Welcome a new generation



ONE Record

unlocks new use cases

that couldn't be achieved
with the legacy messaging
standards

A large, bold, blue number '1' is positioned on the left side of the image, partially overlapping the architectural structure of the airport terminal.The background of the slide is a photograph of a modern airport terminal interior. It features a high, vaulted ceiling with a series of white, curved structural ribs. Large windows on the left side allow natural light to enter. In the center and right, there are multiple levels of walkways with glass railings. People are seen walking on the ground floor, and some are standing near a baggage claim carousel. The overall atmosphere is bright and spacious.

**Digital cargo acceptance,
encompassing piece-level
management and tracking**



2

**Comprehensive data
sharing of cargo tracking
and monitoring devices**

3

**A digital integration
approach for air cargo
security information**

4

Digital collaboration for customs reporting

5

**New digital business
processes and new data
driven value added
services**

Or anything you could think of !

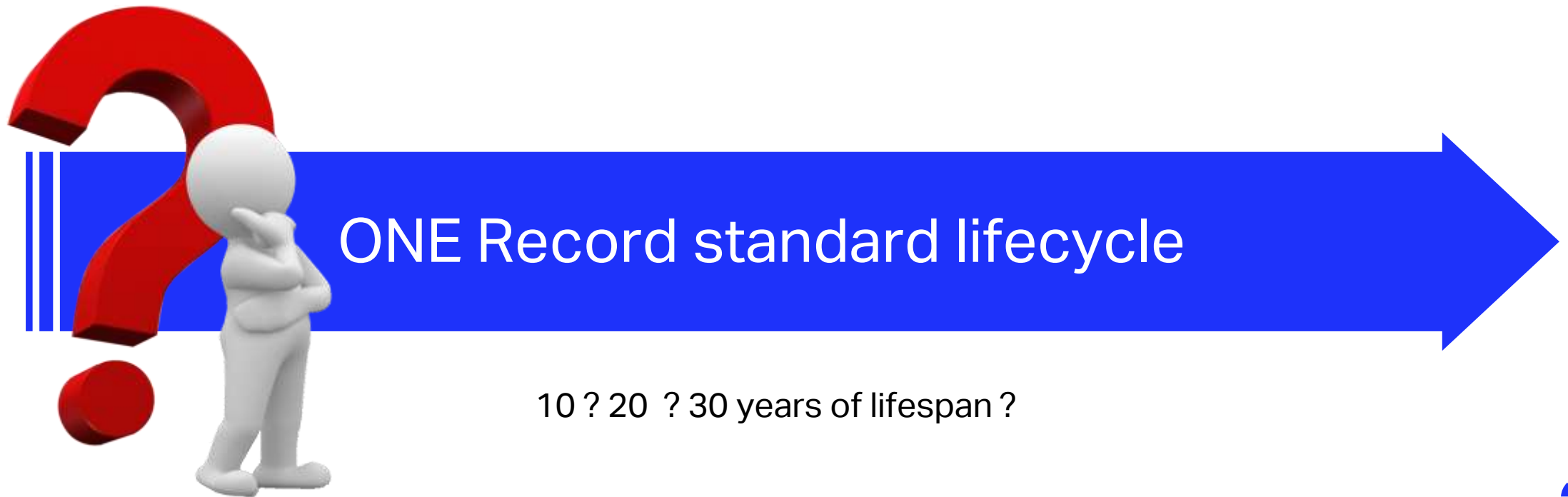


ROI and Investments



ONE Record – a long term vision

It is important to consider both the short-term and long-term ROI. Although the initial investment in ONE Record may seem significant, the long-term benefits can outweigh the costs and ultimately lead to a more efficient and profitable air cargo industry.



Investment Considerations



Consideration for 1R implementation

Beyond costs of implementations, technology and industry collaboration are key elements to consider



Costs and effort



Technology



Industry collaboration

Consideration for 1R implementation

Beyond costs of implementations, technology and industry collaboration are key elements to consider

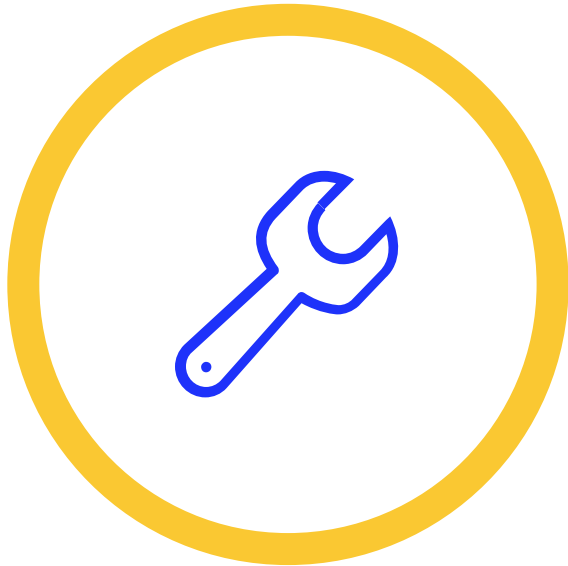


Costs and effort

- Implementation costs and effort
- Cost of messaging vs data sharing operating cost
- Lower cost of maintenance of unified infrastructure vs current cost of maintenance of complex infrastructure
- Training cost to upskills staff / teams

Consideration for 1R implementation

Beyond costs of implementations, technology and industry collaboration are key elements to consider



Technology

- Architecture for ONE Record implementation (in-house infrastructure vs outsourced/hosted infrastructure)
- Data security / identification
- Data retention / archive
- Availability / SLA
- Adoption of linked data approach
- Performance of legacy system in an API environment
- Legacy cargo management system update (including screens update)

Consideration for 1R implementation

Beyond costs of implementations, technology and industry collaboration are key elements to consider



Industry collaboration

- Availability of open-source solution
- Plug & Play connectivity using standard web API
- Customs / regulatory compliance and connectivity (including sanctions)
- Integration of all logistic partners such as trucking companies and other industry stakeholders
- Critical mass vs community led approach
- Learnings / lessons learned from early adopters and pilot projects

Stop looking back when the future is ahead

To achieve a successful digital transformation the air cargo industry needs to leverage on 15 years of digitization attempts and fully embrace its digitalization



Thank You

More info

www.iata.org/one-record



Streamlining Warehouse Operations

DHL Express



Digitalization Shaping the Future of Cargo



Hartmut Brueckner

Vice President Sales, Africa, IBS Software




ibsoftware



Innovation and Digitalization in Air Cargo

Hartmut Brueckner
Vice President, Sales, Europe and Africa



Air cargo showed its true value during the pandemic
How do we continue...



**Further the
mindset shift
on the value of
air cargo**



**Enhance airline
revenue and
yield**



**Prioritize
digital over
legacy**

Today's digital environment is fast and furious





But the cargo industry is challenged with congestion

**And legacy
technology and
processes are
holding us back**

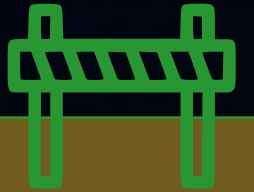




**Cargo operators
must understand
actions and issues
throughout the
entire ecosystem**



Air cargo demand in Africa continues to outperform pre-pandemic levels, with prospects for investment and growth



But fundamental challenges remain

- ! Fuel costs
- ! Connectivity issues
- ! Policy frameworks
- ! Bilateral agreements
- ! Market fragmentation

Defining business excellence and the future of cargo through digitalization

Digital Business



Continuing to redefine and transform the core business for improved efficiency and returns

Digital Connectivity



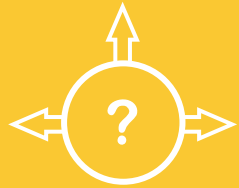
Expanding boundaries with an integrated ecosystem that creates new opportunities

Digital Intelligence



Creating an intelligent ecosystem with AI to build predictability value across the supply chain

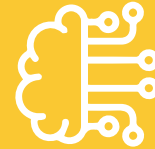
The cargo industry is seeing tremendous change



**Volatile demand
and growth
patterns**



**Rapidly evolving
business landscape**



**New innovative
technologies**



**Changing customer
expectations**

Customers and partners have higher expectations today



Speed



Reliability



Predictability

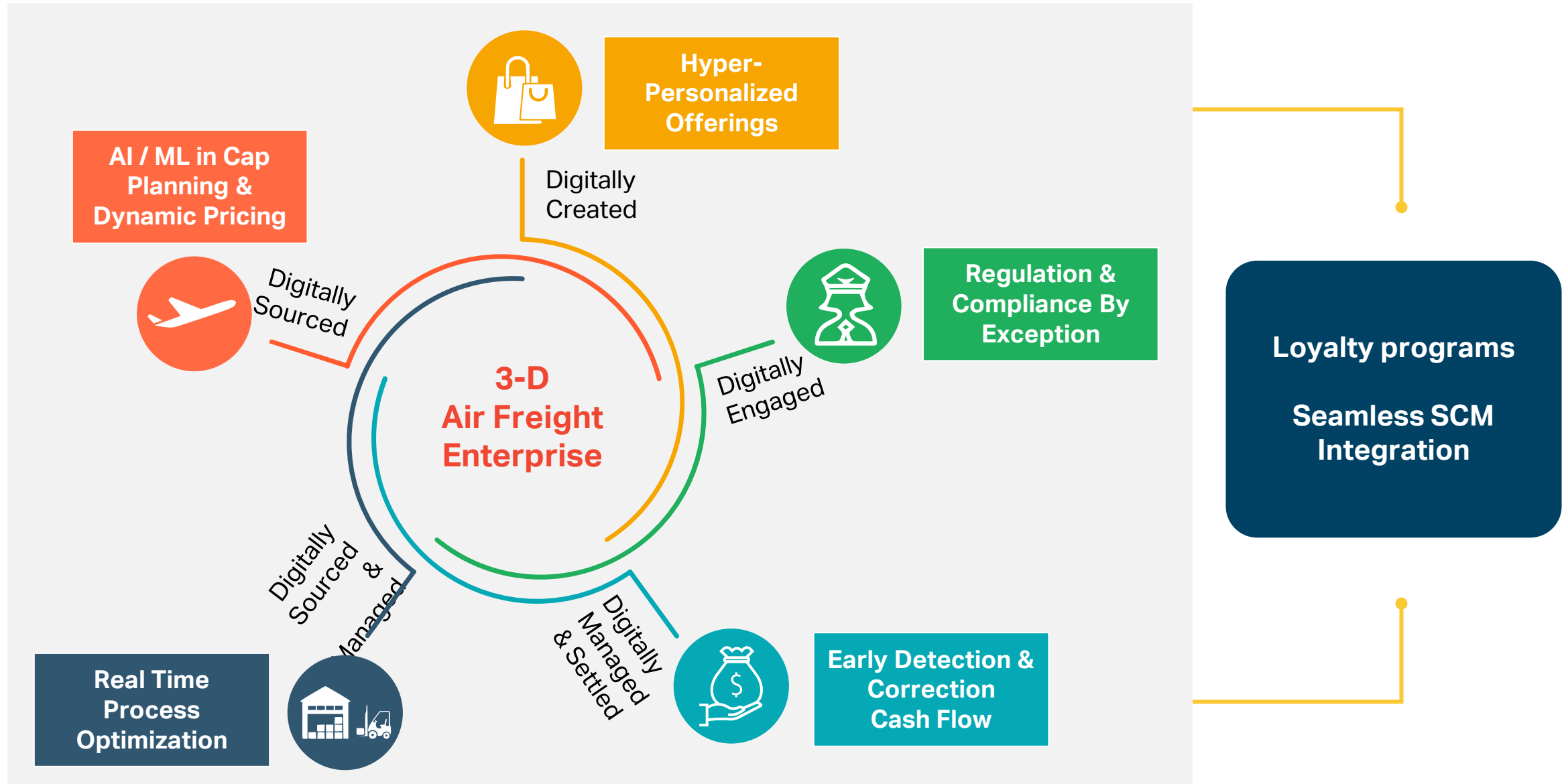


Security

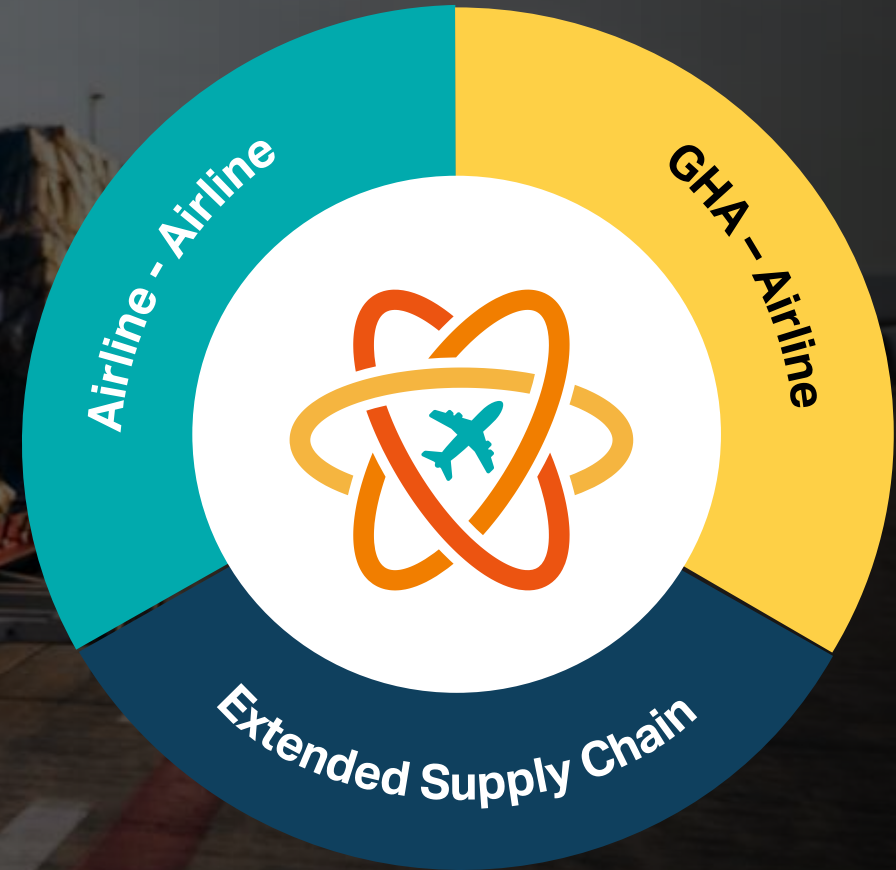


Safety

The Data Driven Digital 'DDD' air freight ecosystem



✔ To meet expectations, the ecosystem must work together



If you only remember three things from this keynote

1

Digital is here to stay. Air cargo must capitalize on the opportunity. Make your data visible, accessible, and useful.

2

Embrace analytics and AI for smarter growth. Invent new business models where the digital twins of our business allow us to cross the boundaries of our imagination.

3

Technology providers are increasingly delivering solutions on a SaaS basis, and it is now easier than ever to buy what you need and importantly, stop buying what you don't.

Thank you

Hartmut Brueckner

Vice President, Sales, Europe and Africa

@ hartmut.Brueckner@ibsplc.com

+41 76 776 6200





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Innovation

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Pre-Loading Advanced Cargo Information (PLACI)



Emma Dayo

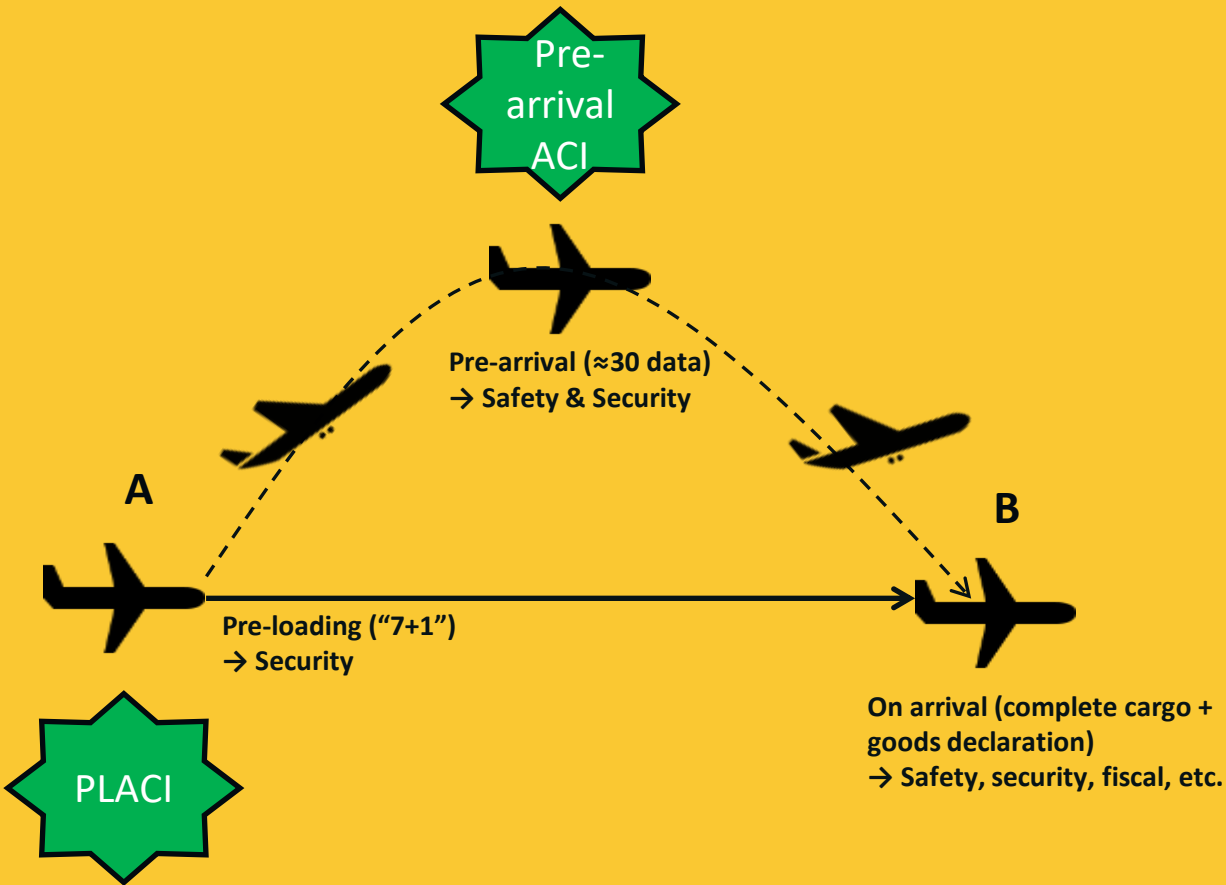
Regional Manager Cargo & Ground operations, Africa Middle East
IATA

Getting ready for
new air cargo PLACI
regulatory requirements

Air Cargo Day South Africa
Johannesburg
09th November 2023



New Security Regime & Air Cargo Security Risk



- Reacting to security threats and incidents, WCO and ICAO have jointly introduced an additional layer in the management of air cargo **security risk**.
- Customs and aviation authorities are increasingly enforcing new **security protocols** to identify and mitigate 'bomb in the box' from being loaded onto aircrafts.
- Airlines and freight forwarders must ensure **compliance** with these new security directives otherwise face **consequences**.

What is EU- Import Control System(ICS)2?

- EU is modernizing its customs legislation with a new fully electronic customs advance cargo information system that will facilitate trade flow through improved data-driven customs security processes.
- ICS2 will collect data about all goods entering the EU at the latest before the goods are loaded onto the aircraft which will bring them into the EU.
- The system will be used by EU customs authorities to ensure security and safety.



https://ec.europa.eu/taxation_customs/customs-4/customs-security/import-control-system-2-ics2-0_en#heading_1

What is required?

- Adapt new **set of procedures** e.g.
 - Get Customs OK TO LOAD prior to loading
 - Immediate action for DO NOT LOAD
 - Setup 24 x 7 contact
- Upgrade **IT systems** for exchange of information with customs
- Take steps to ensure **high-quality, precise data** is provided
- **Support desk & Training** to staff



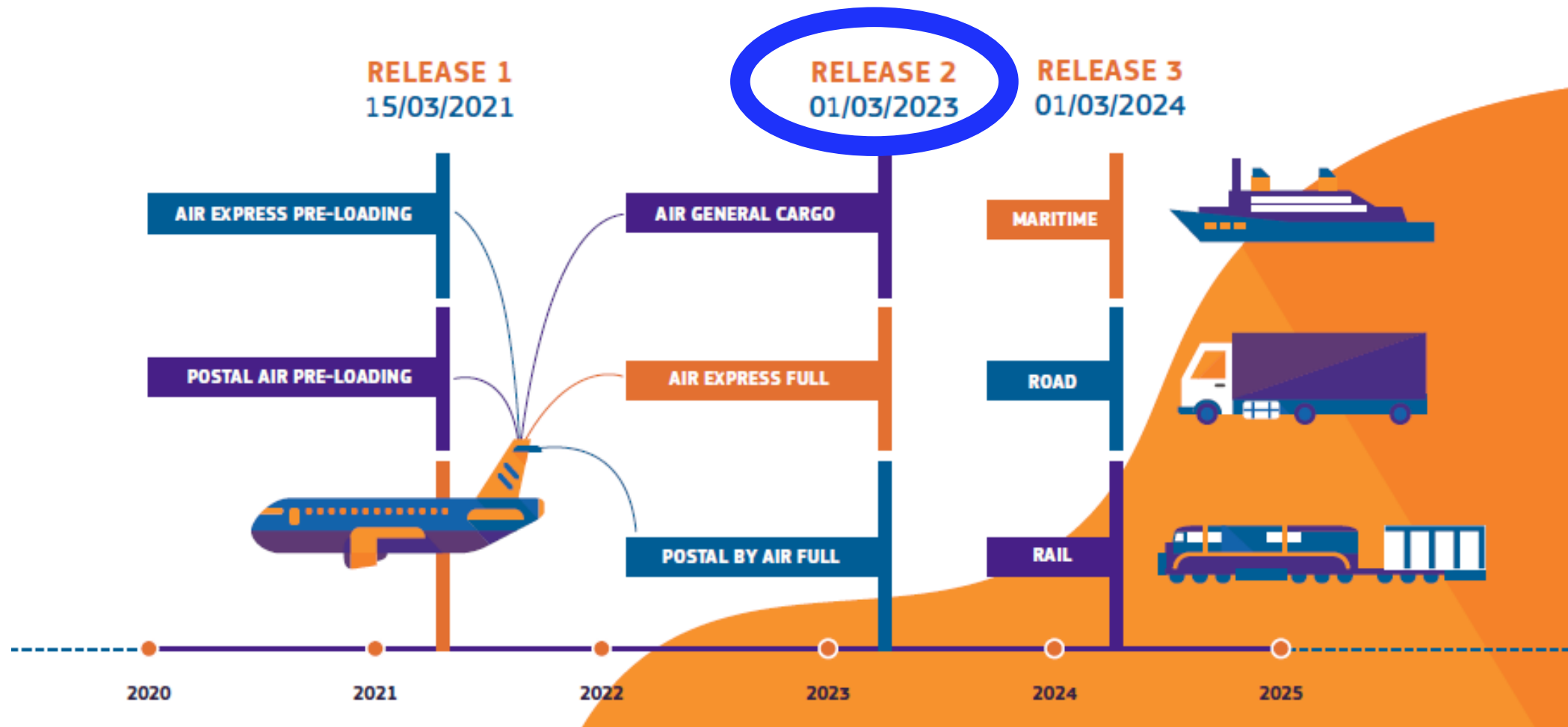
Non-Compliance

Non-compliance may have following impacts:

- **Sanctions** on carriers, **incl. financial penalties**
- Cargo will be **stopped** at the border
- **No customs** clearance of goods
- Unnecessary **interventions**
- **Rejection** of poor-quality declarations



When does ICS2 becomes operational?



Other Similar Initiatives



United States (US)

ACAS - Air Cargo Advance Screening



United Kingdom (UK)

PREDICT - Pre-Departure Information
for Cargo Targeting



Canada (CA)

PACT - Preload Air Cargo Targeting

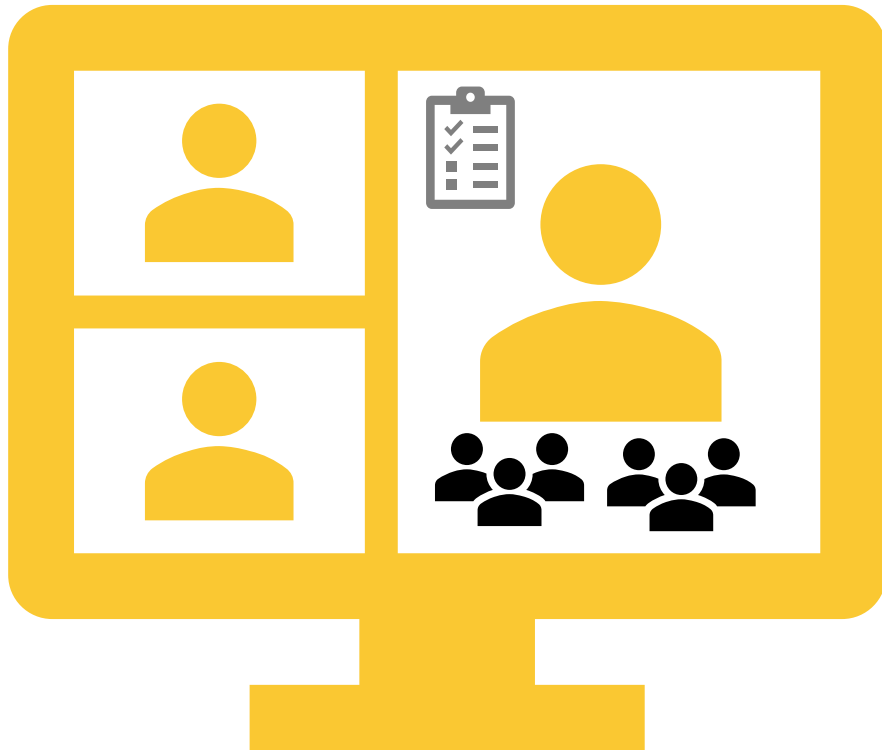


United Arab Emirates (UAE)

NAI Center – National Advance
Information Center

Other governments are expected to follow similar initiatives

What is IATA doing on this currently?



- **Standards** through Board and Working Group
- Advocacy with governments
- Industry **Engagement & Communication**
- Implementation **support**
- **Publications**
- **Recommended Practice**
- Evaluating **Potential Solutions**

Legal basis

PLACI Air Cargo Security referrals:

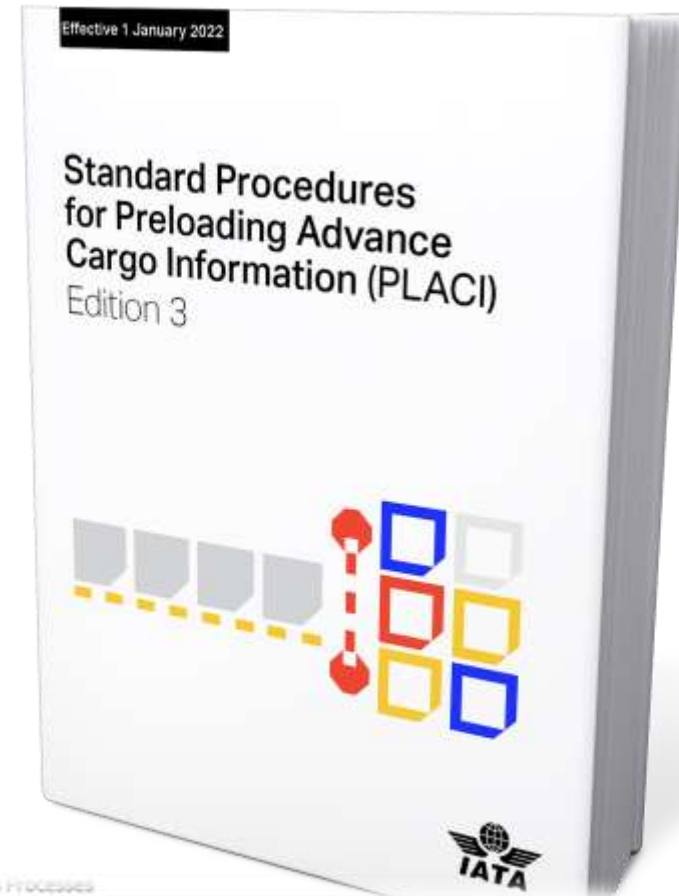
- Commission Implementing Regulation (EU) 2015/2447
Economic Operators' obligations vis-à-vis EU customs authorities – Rfl, RfS, DNL (Art 186)
<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02015R2447-20210315>
- Annex to Commission Implementing Regulation 2015/1998
Obligations of entities vis-à-vis EU AVSEC authorities for PLACI implementation in point 6.8.7
<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32021R0255&from=EN>

PLACI and full ENS data requirements:

- Union Customs Code
Obligation to lodge an Entry Summary Declaration (Art 127)
<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:02013R0952-20200101>
- Data elements: Commission Delegated & Implementing Regulations 2015/2446 & 2447/2015 (as amended)
<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:L:2021:063:TOC>

IATA PLACI Manual

- Purpose: To harmonize PLACI processes
- Contents:
 - Eligible Filers
 - 3rd Party Filers
 - Data Set
 - General Principles
 - Business Processes data filing
 - Guidance on:
 - Mail Advance Filing
 - Self filing Freight Forwarders
 - PLACI Case Study
- Website: <https://www.iata.org/placi>



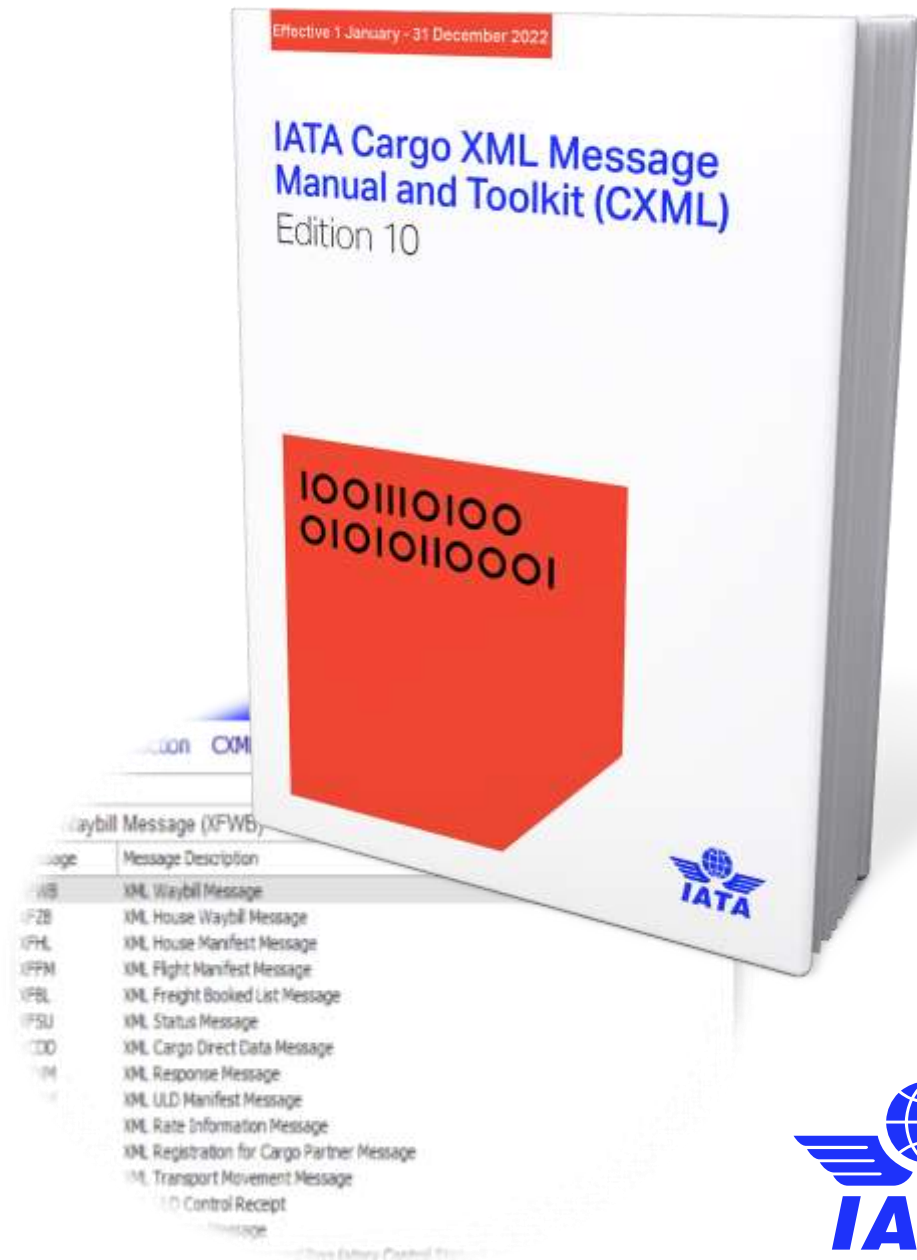
Business Processes

- 8.1 Freight Forwarder Filing Pre-Loading Data for Consolidation Shipment
- 8.2 Freight Forwarder Filing Pre-Loading Data for Non-Consolidation Shipments
- 8.3 Associate Master with Already Filed House Waybill
- 8.4 Airline Filing Pre-Loading Data for Consolidation Shipments
- 8.5 Airline Filing Preloading Data for Non-Consolidation Shipments
- 8.6 Airline Filing Prearrival Data (incl. Preloading Data) at Preloading
- 8.7 Customs Status Notification to Airline, Freight Forwarder and Notify Party



IATA Cargo-XML Manual and Toolkit

- Purpose: To disseminate Cargo-XML standards
- Contents:
 - Cargo-XML Messages
 - Specifications & Schema
 - Conversion Guidelines between C-IMP & XML
 - Implementation Guidelines
 - C-IMP Manual (pdf)
 - Sample Messages
 - Code List
 - OCI Composition Rule Table
 - Mail & Cargo Messaging Synchronization
- Website: <https://www.iata.org/en/publications/store/cargo-xml-toolkit/>



Training

Training courses available:

1. Air Cargo Business Processes
2. Electronic Messaging and Pre-Load Data Filing
3. Cargo Security Awareness

[Register Here](#)

eLearning



In Class Training



Onsite Training



EU ICS2 Compliance



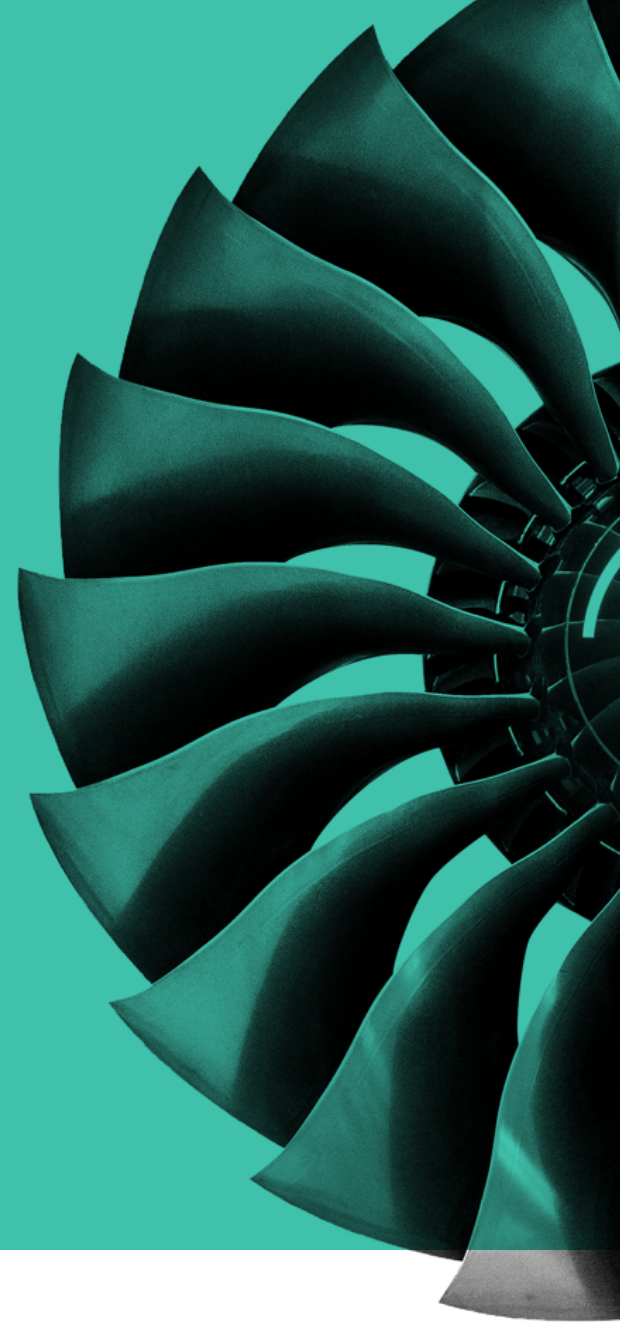
Nicholas Liseche

Area Customer Service Manager East, North Africa & Mauritius- IAG

Compliance with the current EU ICS2 requirements

IAG Cargo

Nov 2023





Agenda

- 01 ICS2 (Import Control System 2)
- 02 Importance of ICS2
- 03 Role of Digital systems
- 04 Go Live - challenges
- 05 Successes

ICS2 (Import Control System 2)

- ICS 2 – The EU’s IT system to collect data about “all” goods entering or transiting the EU prior to their arrival for all carriers.
- On 1st July 2023 goods arriving at the EU via AIR must comply with new requirements for **pre-loading** and **pre-arrival** customs risk assessments (ICS2 Phase 2).
- The Pre-Loading Advance Cargo information (PLACI) data is filed to the EU Member State via ICS2 Shared Trader Interface (STI) to enable risk profiling.
- Customs will be able to send various notifications back to carriers and/or economic operators via ICS2 known as referrals (RFI,RFS,DNL).
- Additional data elements required pre-loading and pre-arrival. i.e. EORI (Economic Operator Registration Identification) and 6-digit HS Codes at AWB/MAWB and HAWB level.
- Change to acceptance procedures.
- Freight Forwarders can apply for an extension until 2nd October 2023 if they wish to be a declarant, ie self/house filing.
- **FWB** and **FHL** messages play a vital role in ICS2 compliance, as they facilitate the exchange of critical shipment information. It is imperative that **accurate and complete FWB and FHL messages** are provided for every shipment to ensure efficient processing and compliance with regulatory requirements.

Importance of ICS2 (Import Control System 2)

- ICS2 – The EU's IT system to collect data about "all" goods entering or transiting the EU prior to their arrival for all carriers.
- European Union's EU-ICS2 program, is a vital initiative that aims to **enhance air cargo security and streamline customs processes by ensuring that relevant cargo information is provided in advance.**
- This proactive approach allows authorities to **conduct risk assessments and perform necessary security checks** before the cargo is loaded onto an aircraft. By implementing PLACI, we are demonstrating our commitment to maintaining **a safe and efficient air cargo system.**
- ICS2 (Import Control System 2) is a comprehensive framework designed to **strengthen import control procedures and enhance security throughout the supply chain.** By leveraging advanced information technology and risk assessment methodologies.
- **ICS2 enables customs authorities to effectively identify and target high-risk shipments, ensuring compliance with applicable regulations and safeguarding the integrity of international trade.**

Role of Digital systems

- Air cargo needs to continuously improve its efficiency. The area with greatest potential is **digitalization**. IATA outlined three goals:
- 100% airline capability of **ONE Record by January 2026**. This initiative will replace the many data standards used for transport documents with a single record for every shipment. The Cargo Services Conference agreed that it wants to achieve 100% airline capability by 1 January 2026 and the Cargo Advisory Council supports this vision.
- Ensuring digital standards are in place to support the global supply chain. Guidance has been finalized on **tracking devices** – the IATA Interactive Cargo guidelines - used to **monitor the quality and accuracy of conditions of time and temperature sensitive goods** being shipped across the world.
- Ensuring compliance and support for customs, trade facilitation and other government processes that are increasingly digitalized. i.e., **ICS2 compliance** - integration of PLACI and ICS2 principles into our operations is very key and thus Airlines, Ground Handling Agents, Freight Forwarders need to upgrade their systems to facilitate compliance.
- Digitalization plays an important role in evolving **strategies for trade facilitation**, reducing **operational barriers at borders** and **managing the flows of goods securely**.

Post go live - challenges

- Four member states did not go live on 1st July and adopted BCP, including Greece and Denmark. There were delays in response to filings. Agreement gained in Sep that enabled forward on condition that we have received an acceptance of our filing (not approval) and MRN number issued.
- Personal effects challenge
- FWB, FHL with errors from Forwarders. Mainly HS and Post codes.
- Last minute products due to their nature i.e. PER.
- EU, ICS2 challenges log helped to address issues for continuous improvement.
- Consolidation – HAWB must be present and code NC used, MAWB – code NG.

Successes

- Continuous monitoring of EU transit / terminating shipments for AC.
- FWB, FHL compliance dashboard to track performance.
- SME's across the network.
- Team work across relevant departments.
- Drop in sessions – creating awareness from all Ops and commercial staff.
- Weekly meetings – SME's.
- Contact list – National Service Desks (customs) of all EU member states – escalate delays.
- FAQs in The Loop.

Your questions

Thank you - **QUESTIONS?**

Customs Reporting and ONE Record

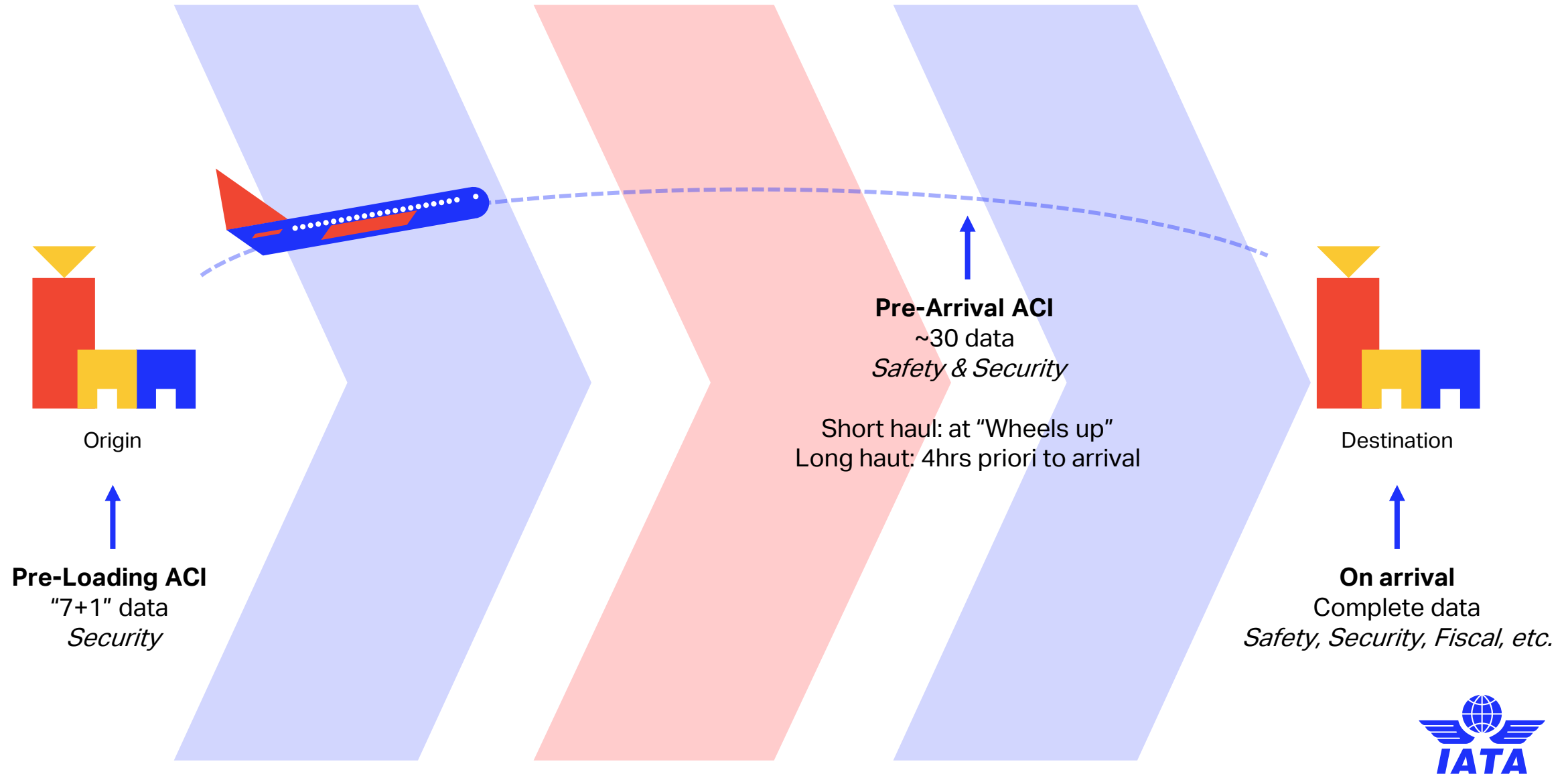


David Sauv
Senior Manager Digital Cargo, IATA

Customs are evolving

- Advance Cargo Information (ACI) in accordance with WCO SAFE
- Various EDI requirements: XML messages, Cargo-XML messages or other formats

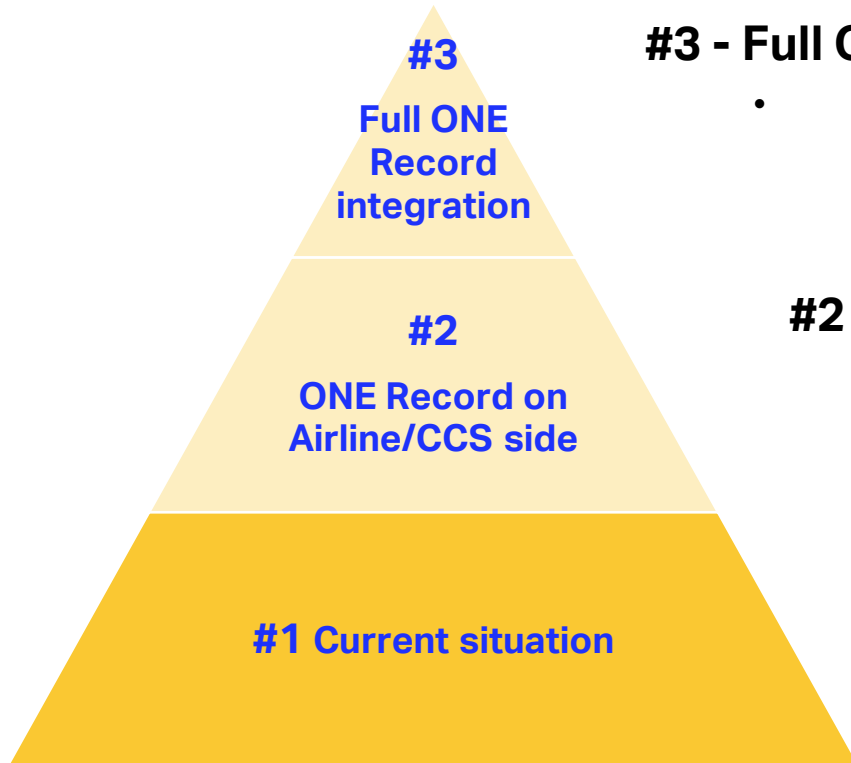
Advance Cargo Information in a nutshell



Data sharing standards need to evolve to keep up with upcoming Customs requirements



Customs and ONE Record integration maturity



#3 - Full ONE Record integration with Customs:

- Airlines, CCS and Customs are able to share data via ONE Record APIs

#2 - ONE Record integration on Airline*/CCS side:

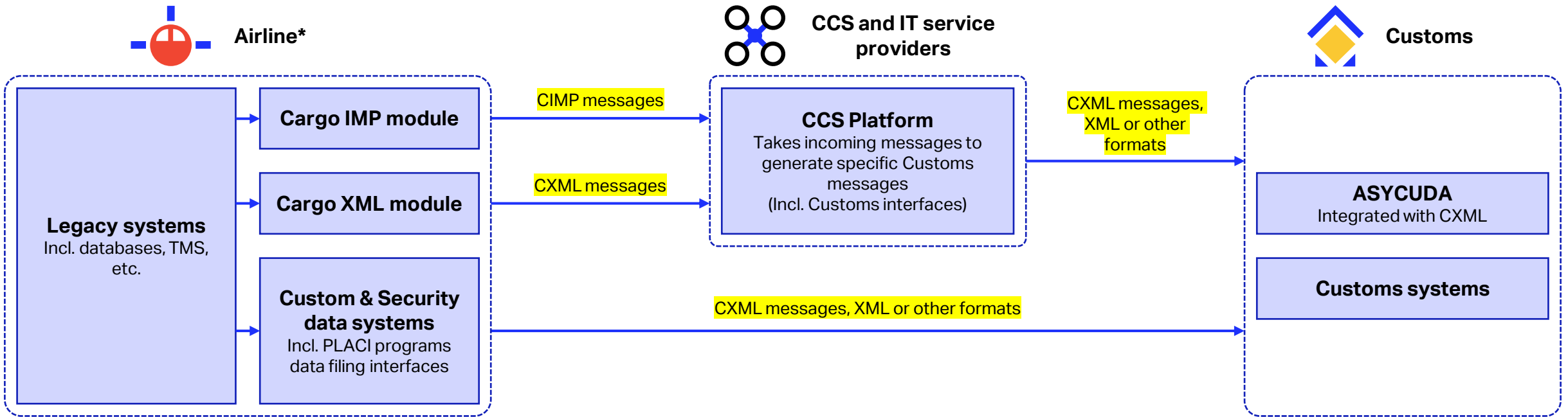
- Airlines and CCS are able to share data via ONE Record APIs
- Customs still receive information through message standards, same as current

#1 - Current situation based on:

- Cargo IMP and Cargo XML messaging standards on Airline/CCS side
- XML, CXML (e.g. ASYCUDA) or other formats on Customs side

* In the case where the forwarder is doing a self-filing, the same architecture is applicable

#1 – Current situation

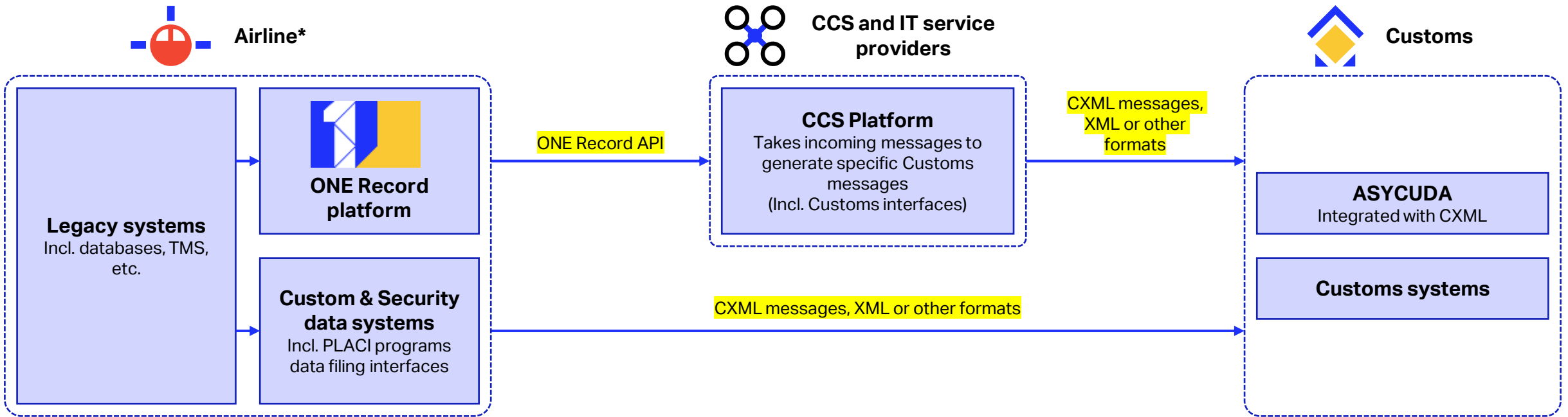


* In the case where the forwarder is doing a self-filing, the same architecture is applicable

Airlines* communicate with Customs:

1. Via CCS by sending CIMP/CXML messages to CCS. CCS then sends appropriate message to Customs via their interface
2. Directly by sending required message formats (CXML with ASYCUDA, XML or other formats)

#2 - ONE Record integration on Airline and CCS side

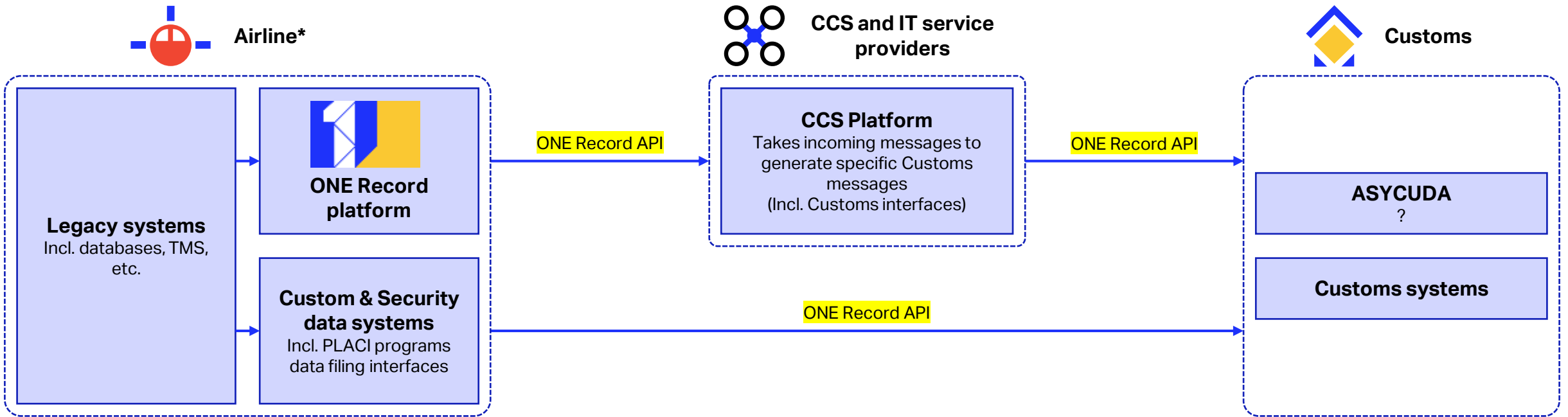


* In the case where the forwarder is doing a self-filing, the same architecture is applicable

Airlines* communicate with Customs:

1. CCS has access to Airline data through the ONE Record API. CCS then sends appropriate message to Customs via their interface
2. Directly by sending required message formats (CXML with ASYCUDA, XML or other formats)

#3 – Full ONE Record integration with Customs



* In the case where the forwarder is doing a self-filing, the same architecture is applicable

Airlines* communicate with Customs:

1. Customs have access to Airline data through the ONE Record API, either directly on the Airline server or through the CSS

Key take-aways

- CIMP is not maintained anymore, therefore it is not fully compliant with upcoming Customs requirements like PLACI programs
- CXML enables to mitigate some of CIMP technical limitations. However the information is only at shipment level
- Move to ONE Record is a critical enabler to comply with customs and legal requirements in the future

Collaborating for success

The Digital Ecosystem

Moderator:

Annette Naude,

Regional Head of Life Sciences & Chemicals – MEA, DHL



Panelists:



Dick Murianki, Director
Cargo, Kenya Airways



Hartmut Brueckner,
Vice President Sales,
Africa, IBS Software

Burt Jonker,
GM Cargo, Swissport



Digitalization Shaping the Future of Cargo



Sam Munda

Regional Sales Representative, Cargo Flash



AIR CARGO DIGITALIZATION



ONE Record: The Road Ahead



David Sauv
Senior Manager Digital Cargo, IATA

ONE Record

One step closer to digital cargo

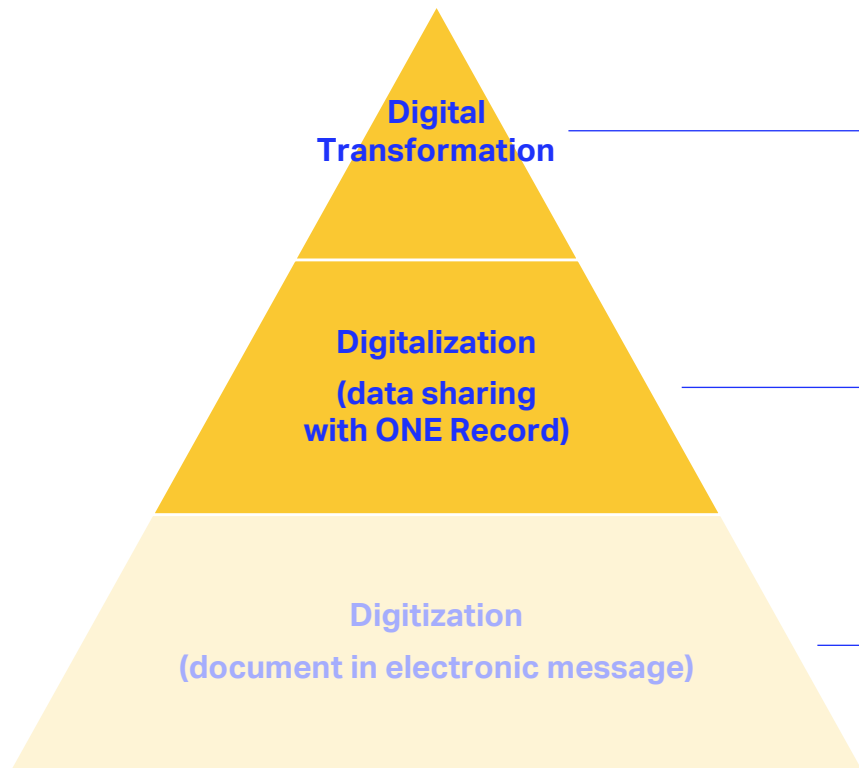
David Sauv

Senior Manager, Digital Cargo, IATA

**The Road Ahead: Preparing for ONE
Record Implementation**



Shape the future with Digital Transformation



Digital Transformation

Create new value-added services, transform the business model / **Digital mindset by default**

Digitalization
(data sharing with ONE Record)

Define new business processes through the use of data & optimize operations / **Data centric by default**

Digitization
(document in electronic message)

Capture information in electronic format (CIMP-CXML / **electronic document**)

CIMP is no longer supported since 2015. CXML addresses few technical limitations of CIMP but is still a messaging standard based on document.



The Vision

An end-to-end digital logistics and transport supply chain where data is easily and transparently exchanged in a digital ecosystem of air cargo stakeholders, communities and data platforms

How do we get there ?



The air cargo industry has a choice



Fully implement year 2000 document-based messaging standards before migrating to the next generation with a 20-year lag

Reset expectations and align air cargo with current web technologies and enable data driven businesses and operations

Proceeding has implications



Reset expectations and align air cargo with current web technologies and enable data driven businesses and operations

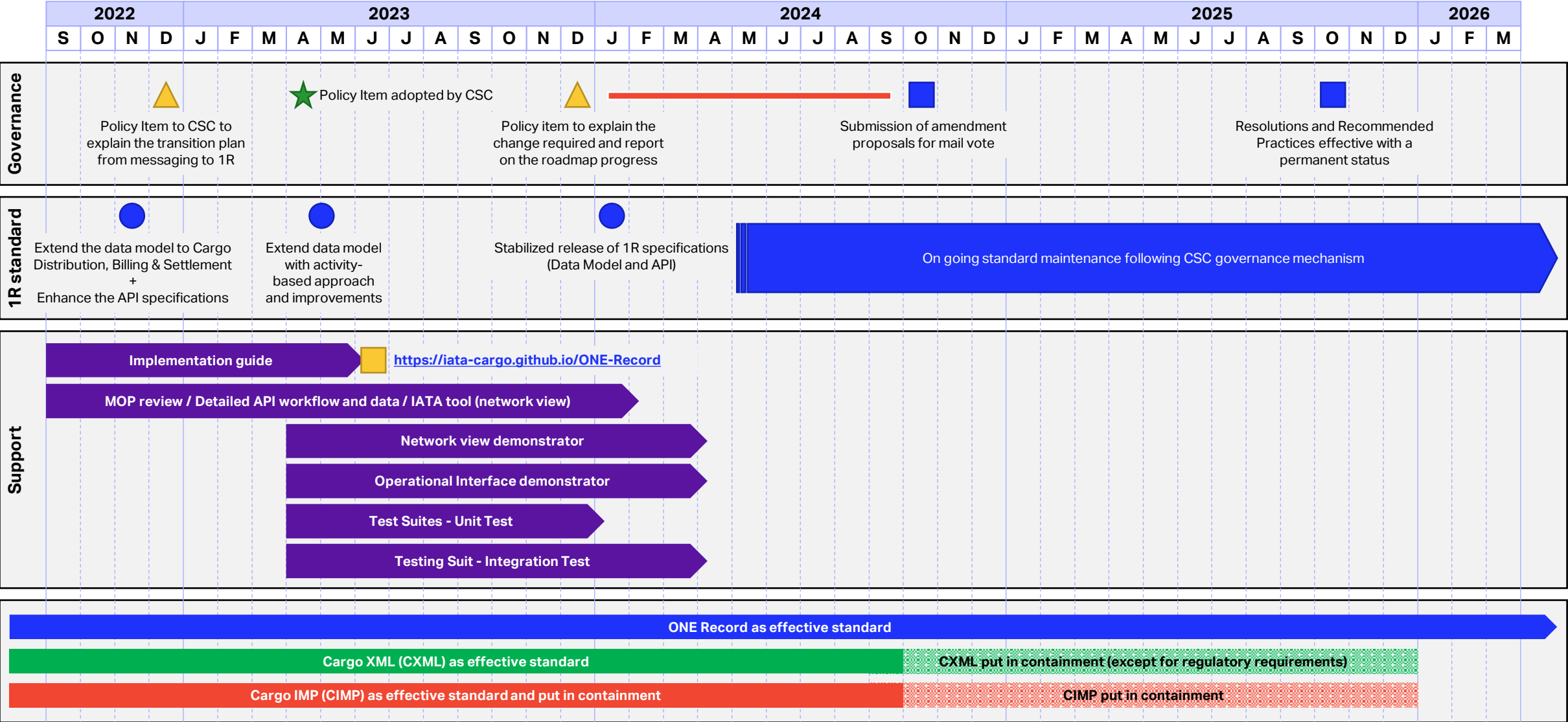


- The standard must be ready
- The industry must commit
- No change without deadline

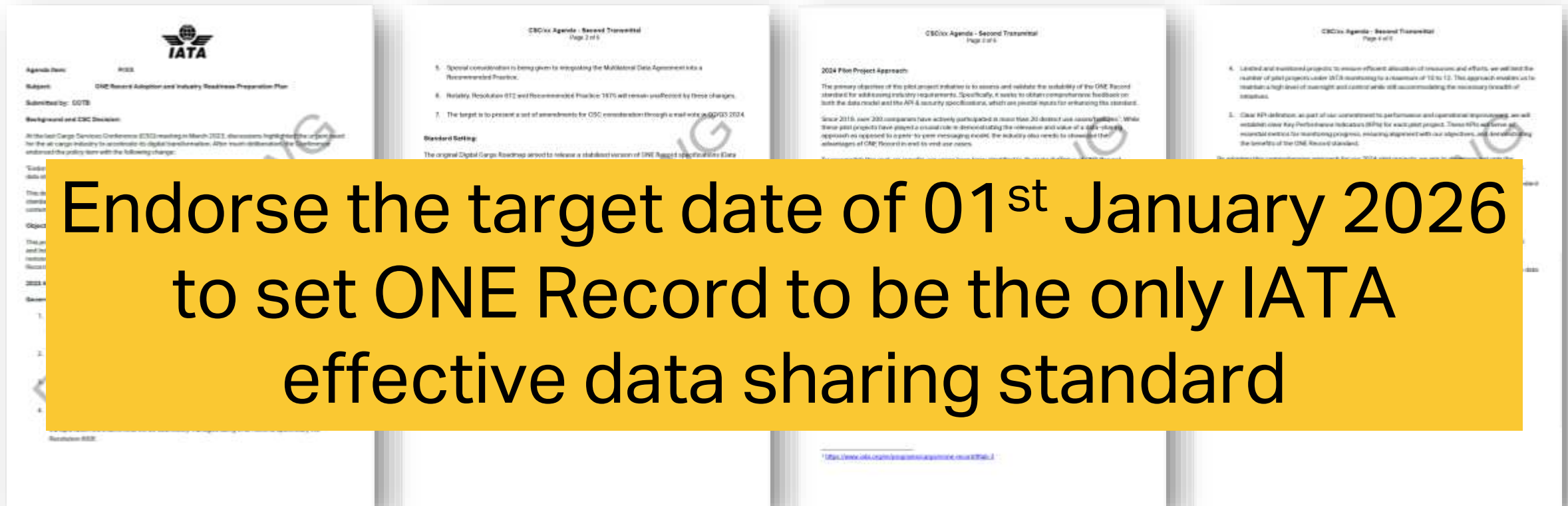
CSC endorsement

“The CSC endorsed the policy item to execute the activities required to target One Record to be the only IATA effective data sharing standard as of 01st January 2026”

Proposed - IATA Digital Roadmap



Policy Item to CSC: ONE Record Adoption and Industry Readiness Preparation Plan





Call for Action

Pilot Project 2024



An aerial photograph of an airport tarmac. A large white number '1' is overlaid on the left side. The tarmac features red diagonal lines, a white diagonal striped area, and a white car parked on a road at the bottom. A semi-transparent grey box containing text is positioned on the right side of the image.

1

**Digital cargo acceptance,
encompassing piece-level
management and tracking**

2

**Comprehensive data
sharing of cargo tracking
and monitoring devices**

An aerial photograph of an airport tarmac. In the center, a white car is parked. To the left, a yellow ground support vehicle is visible. In the bottom right corner, the tail section of a white aircraft is partially visible. A large, white, semi-transparent number '3' is overlaid on the left side of the image.

3

**A digital integration
approach for air cargo
security information**




4

Digital collaboration for customs reporting

5

Digitalization of the Shipper's Declaration for Dangerous Goods

An aerial photograph of an airport tarmac. A large white commercial airplane is parked at a gate, with its tail fin visible on the right. Ground support equipment, including a mobile staircases and other service vehicles, are positioned around the aircraft. A red and white striped barrier is visible on the left side of the frame. The tarmac surface is marked with yellow lines and a small black sign with the number '12' is visible near the aircraft's nose.

6

**Digital connectivity for the
distribution of cargo
products from carriers to
forwarders**

Call for Action

Need to have commitment
of pilot project participants
by end of 2023 to start the
projects in January 2024
latest



Thank You

More info

www.iata.org/one-record



Closing Remarks



Alex Stancu

Area Manager – Southeast Africa – AME, IATA