



Trends in the Postal Supply Chain and Air Mail Outlook

Exploring the evolution and future of global mail transport networks



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A Century of Partnership: Postal Services and Aviation



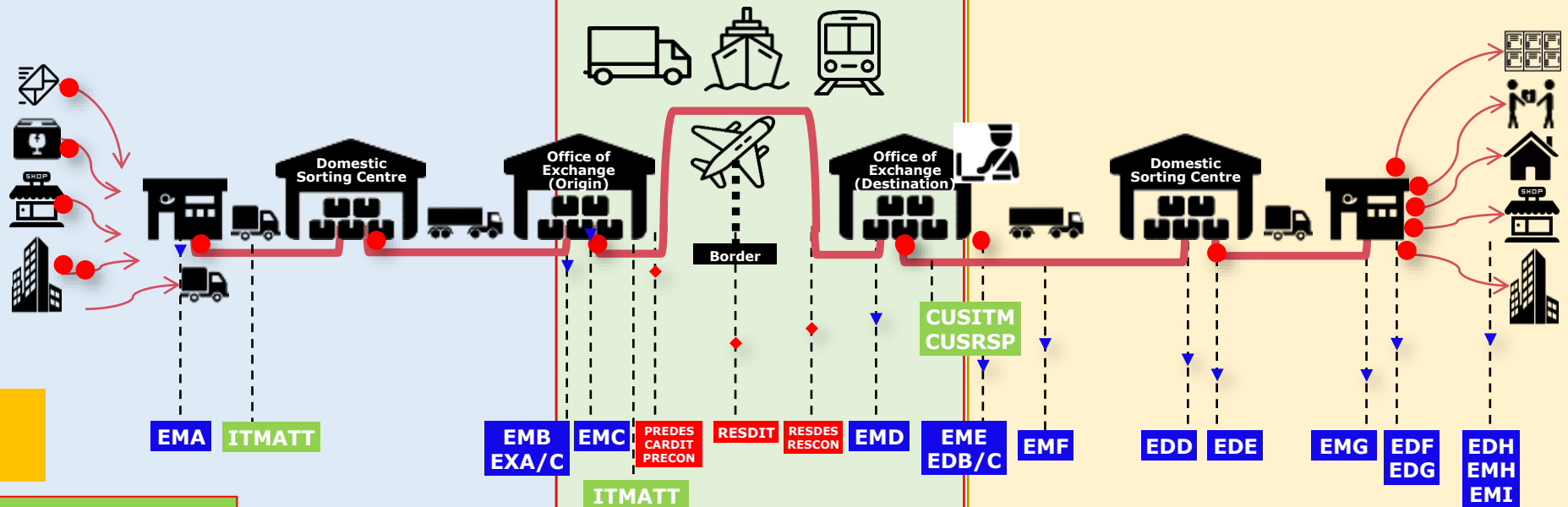
The first official airmail flights in **1911**, from fragile biplanes carrying handwritten letters to modern cargo jets transporting millions of parcels daily
75th Anniversary of the decision to create the IATA-UPU Contact Committee



Export – leg 1 Country of origin

International transport – leg 2

Import – leg 3 Country of destination



traceability

visibility

data compliance

security and safety

new business models

Data is King

Current mail supply chain challenges



Digital transformation

EAD implementation, data sharing and compliance, paper-free process, AI integration reshaping mail operations, etc.

Security threats

ICS2 and STOP Act, compliance requiring enhanced screening, checks, data and procedures across network, IID threats, need for global rules for risk assessment, etc.

Network disruptions

Political challenges, new regulations, tariff battles and processes, embargos, volume fluctuations and transport volatility creating operational complexity, payment discipline, lack of routes, higher transport rates, etc.

New business models

Move from B2C to B2B2C or D2C, major differences between countries' status, cooperation with WPSPs, mail vs cargo, sustainable solutions, etc.



Strategic UPU supply chain goals/activities

Data and digitalization

- EAD – Global Postal Model
- Data sharing and compliance
- Paper-free processes
- AI

Flexible transport network

- Cooperation with WPSPs, cargo
- Regional transport hubs
- All modes of transport
- Move to logistics (first- and last-mile delivery)

Security and safety

- Security certifications (S58/S59, AEO, RA)
- Regulation monitoring/training
- Stakeholder liaison

Customs and standards

- Overcome new regulatory, tariff and *de minimis* environment
- Improve data quality, support pre-clearance via DDP

New business models, products and sustainability

- From social to commercial mail
- Targeting B2B2C, D2C
- Cargo and mail (PAWB)
- Sustainability



We need to keep mail moving



Strategic UPU Supply chain goals/activities

Data and digitalization

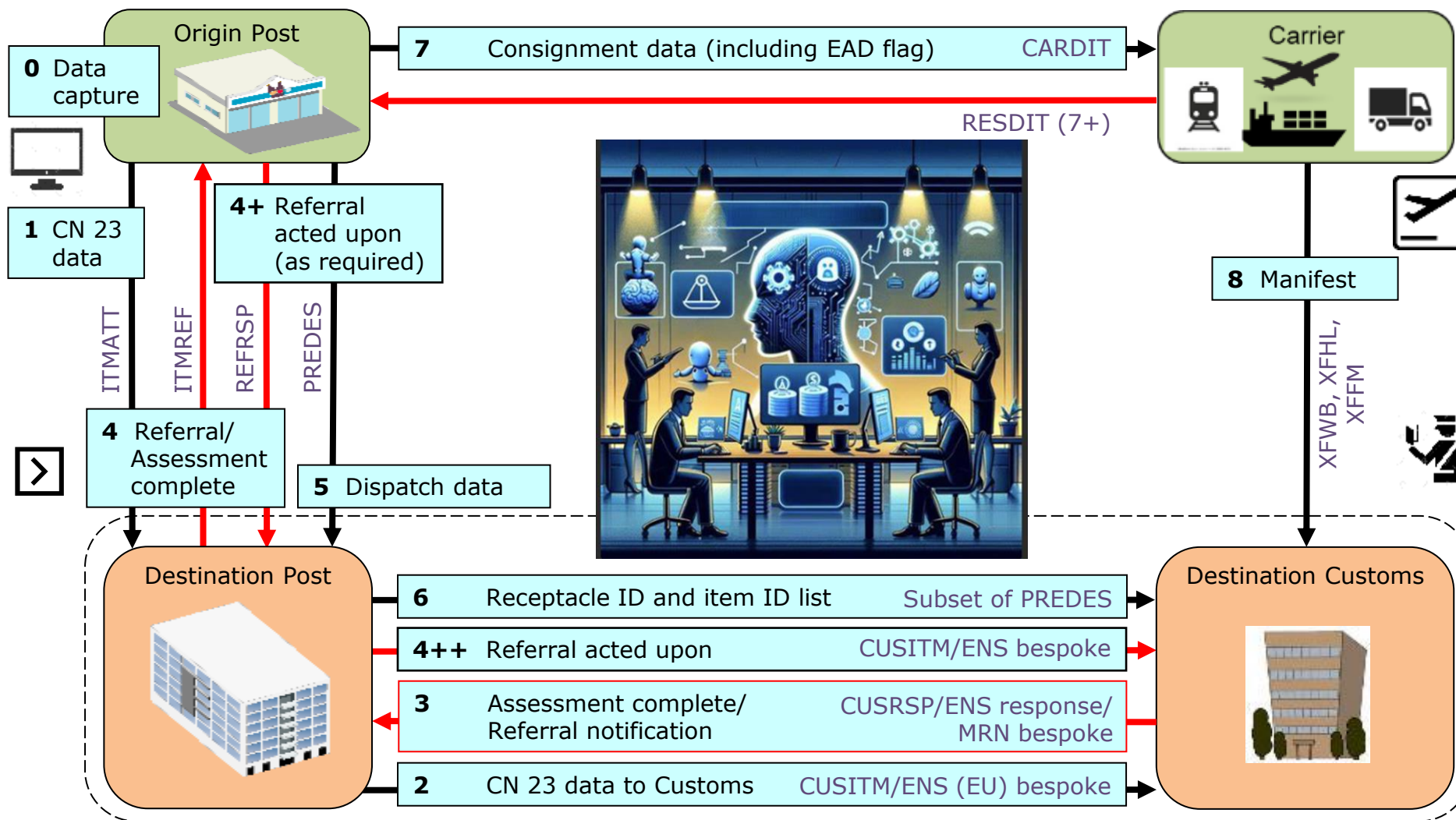


- EAD - Global Postal Model
- AI
- Data sharing & Compliance
- IT tools
- Capacity building
- Paper Free processes
- eCSD
- support data pre-clearance and risk assessment via other channels (e.g. postal portals, ITMATT V2, IOSS, DDP, One Record, DGST, Countercheck, Unified Data Platform...)





UPU Global Postal Model for EAD and pre-loading advance cargo information (PLACI)



195
Number of DOs
sending CARDIT

102
Number of air
carriers sending
RESKIT

5000
Paper free routes

AI already helps
to check data
compliance, add
missing data or
detect dangerous
illicit or
counterfeit goods



Strategic UPU Supply chain goals/activities

Flexible transport network



- Data (EDI? API?) exchanges with all carriers
- Leg2 performance improving
- Testing cooperation with Wider Postal Sector Players (cargo carriers, integrators, consolidators ...)
- Mob app for carriers/DOs
- Multimodal transport
- Regional mail transport hubs
- Cargo versus mail
- AI route optimization





Flexible mail transport network



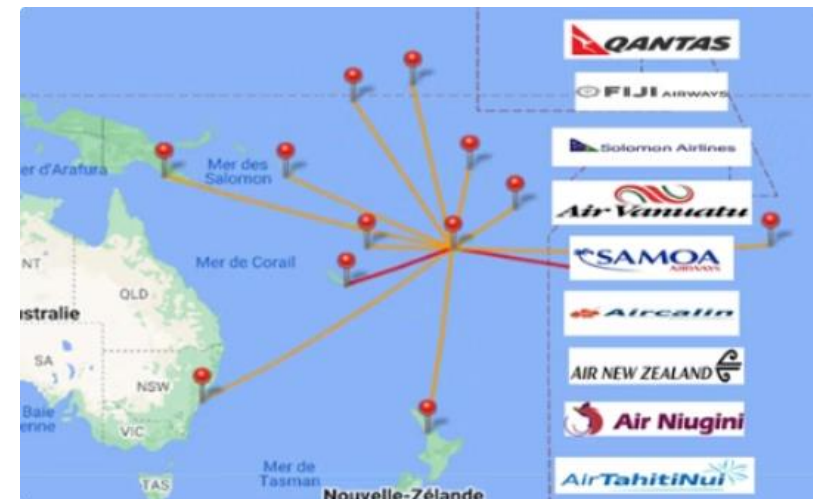
Global Air Network

Strategic flight connections linking major exchange offices worldwide.



Regional Mail Hubs

Consolidation centers for efficient cross-border mail processing.



Alternative Transport Modes

Rail, sea and road connections complementing air transport.



Mail versus Cargo

- Shift towards cargo processing (B2B2C, D2C)
- Despite two different “systems” or two different “languages”, greater need for operational flexibility
- Partnership opportunities with cargo carriers (more links and capacity, security threats mitigation, embargo workarounds, competitive rates...)
- regulations

POSTAL
MAIL



CARGO





Strategic UPU Supply chain goals/activities

Security and safety

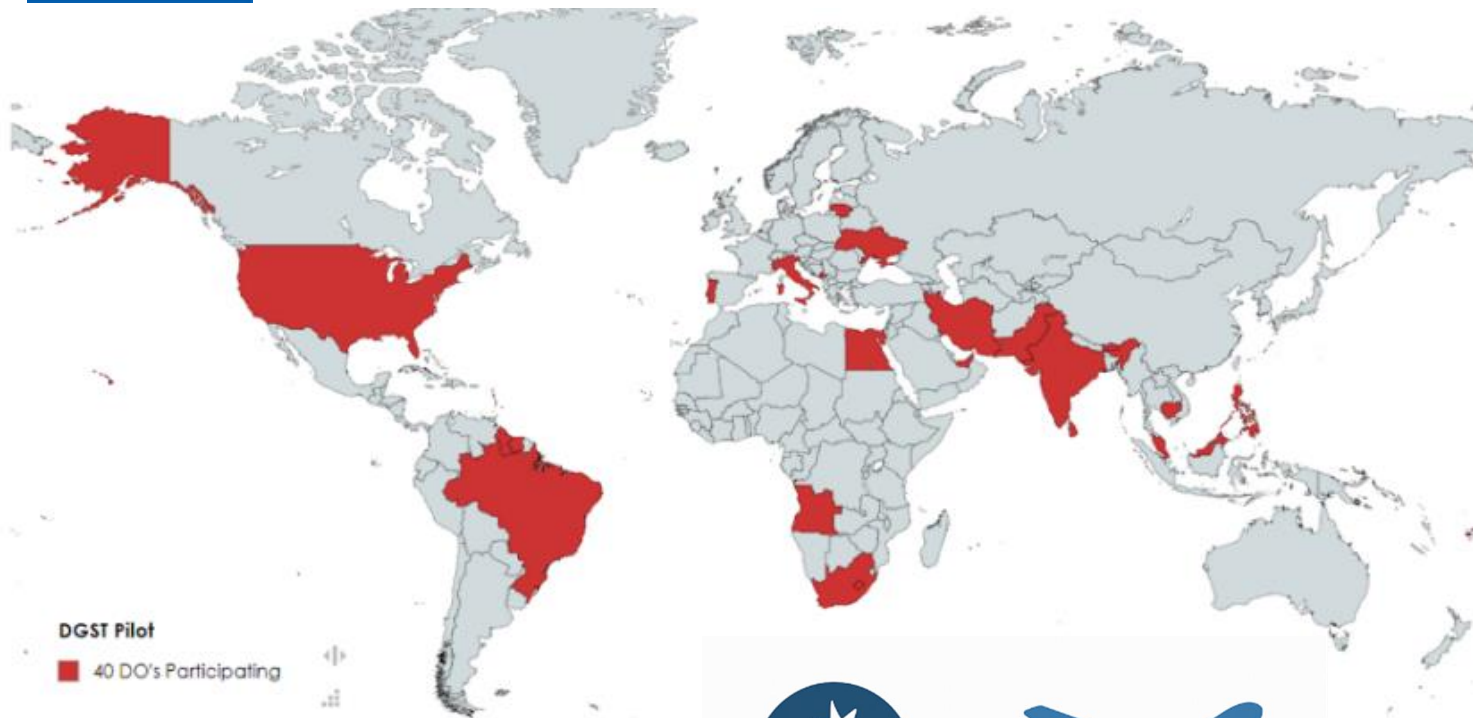


- Latest security threats and regulations monitoring
- Screening capabilities and requirements meeting ICAO rules
- Trainings – virtual and physical (IATA, ICAO, INCB)
- UPU Security Certifications (S58/59)
- Support for RA, AEO certification
- Communication with relevant stakeholders on global regulations
- Regional security groups support
- New technology tools with AI support





Dangerous goods searching tool (DGST)



AI-powered detection of dangerous goods, illicit items and counterfeit

API interconnection
opportunities with
IATA (One Record), UPU
(DGST), International
Narcotic Board ...



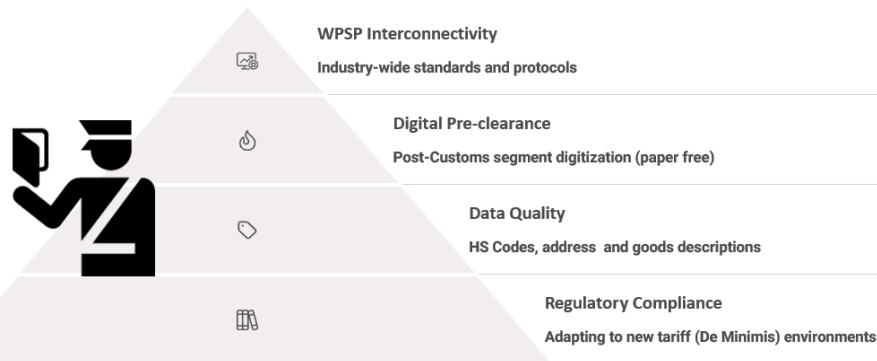


Strategic UPU Supply chain goals/activities

Customs and Standards



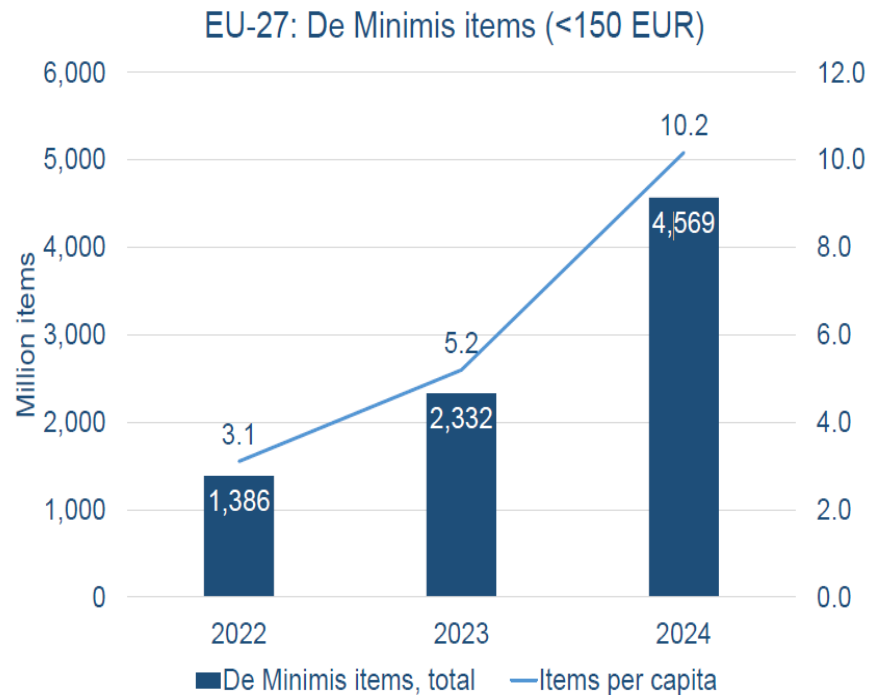
- improve data quality (HS Codes, goods descriptions)
- overcome new regulations and data requirements (Tariff Codes, importer ID, no cash, content check ...) new tariff and de minimis environment
- toward to paper free process
- full digitization of the Post-Customs segment and support pre-clearance
- new CDS functionalities and third-party tools
- WPSP interconnectivity and standards



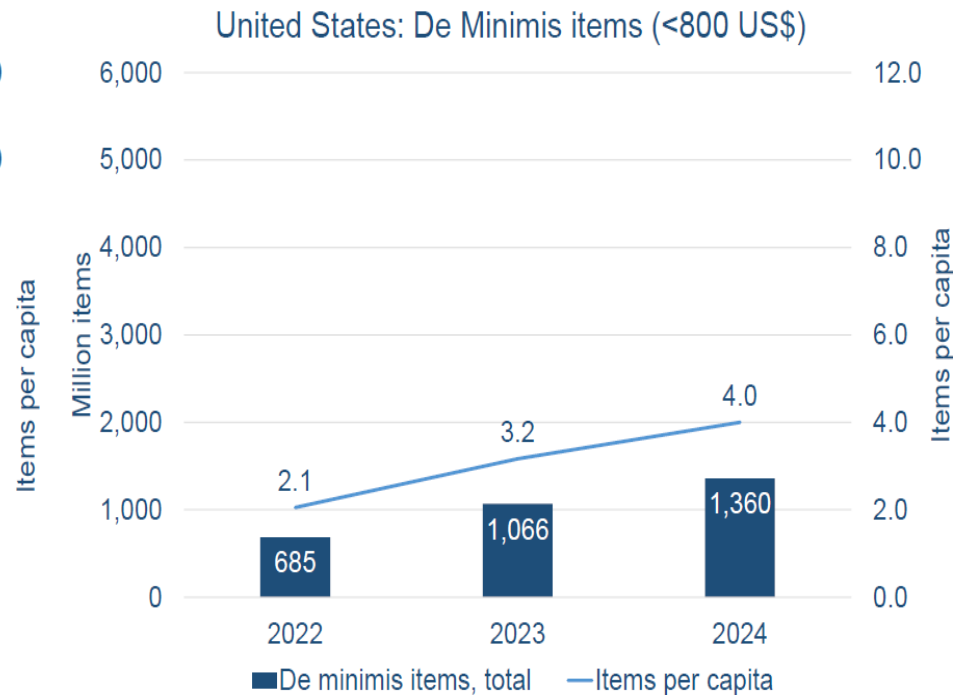


Exponential growth of the *de minimis* shipments

Customs data shows accelerating growth in cross-border e-commerce shipments



Source: WIK, EU Surveillance



Source: WIK, US CBP

De Minimis thresholds reductions/removals trend (current examples)

EU (150 EUR) + 2 EUR per item handling fee soon
US (800->0 USD, just CN)

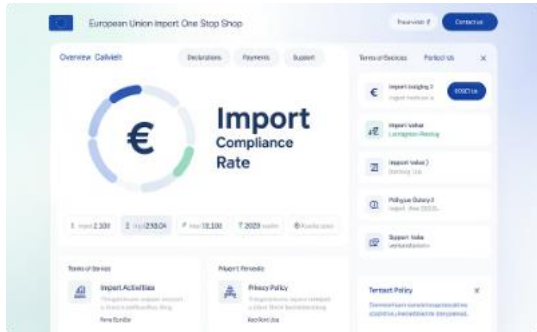
RU (200 EUR), SA (1000 SAR), AU (1000 AUD), TH (1500 THB), UK (135 GBP), RS (50/70 EUR), TR (30 EUR), MN (0 EUR)

Customs data reveals the evolving logistics models for cross-border e-commerce

- EU customs clear approximately 13 million low-value items per day
- US customs clear approximately 4 million low-value items per day



UPU Context Solutions for Prepaid Taxes/Duties



Prepaid Duty Regime

Import One Stop Shop (IOSS) and VAT E-commerce (VOEC) regimes for prepayment of taxes in EU and Norway



Self-Declared / Complemented by Recipient

Systems used in Brazil and Argentina where recipients provide additional customs information



Delivery Duties Paid (DDP)

The sender assumes full responsibility for customs duties and taxes before delivery



Prepayment of Duties

Pre-clearance through authorized customs agents before the item arrives at the destination



Strategic UPU Supply chain goals/activities

New business model, products and processes

- B2B2C trend
- Cargo versus mail process
- PAWB
- New products, services
- First and last mile
- Warehousing
- Move from mail transport management to full mail flow logistics





Posts democratized e-commerce emergence

The international postal system has been a driver of cross-border e-commerce



Source: UPU, University of Antwerp

The phenomenal growth of e-commerce was powered by UPU

- Until 2020, postal channels carried the bulk (~60%) of lightweight packages under 2 kg
- International small packets volumes were rising ~8% annually in the mid-2010s
- Single interoperable network for small packets



But, there is a shifts towards new logistics models

International postal volumes and tonnage have substantially declined since 2020



Source: UPU, University of Antwerp

Emergence of new D2C and B2B2C e-commerce models has decreased the usage of UPU's international network

- New logistics solutions capturing most growth in cross-border e-commerce shipments
- The postal channel has lost ~50% of its tonnage

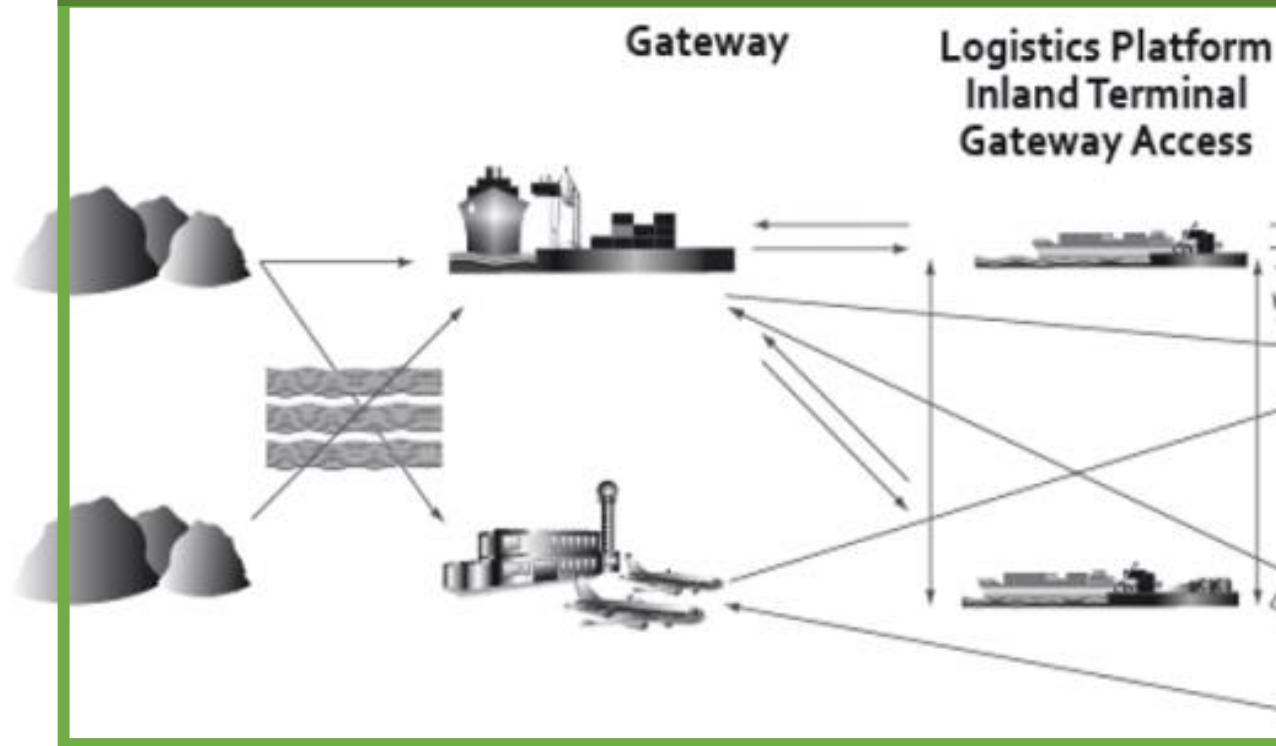


eCommerce and eCosystems

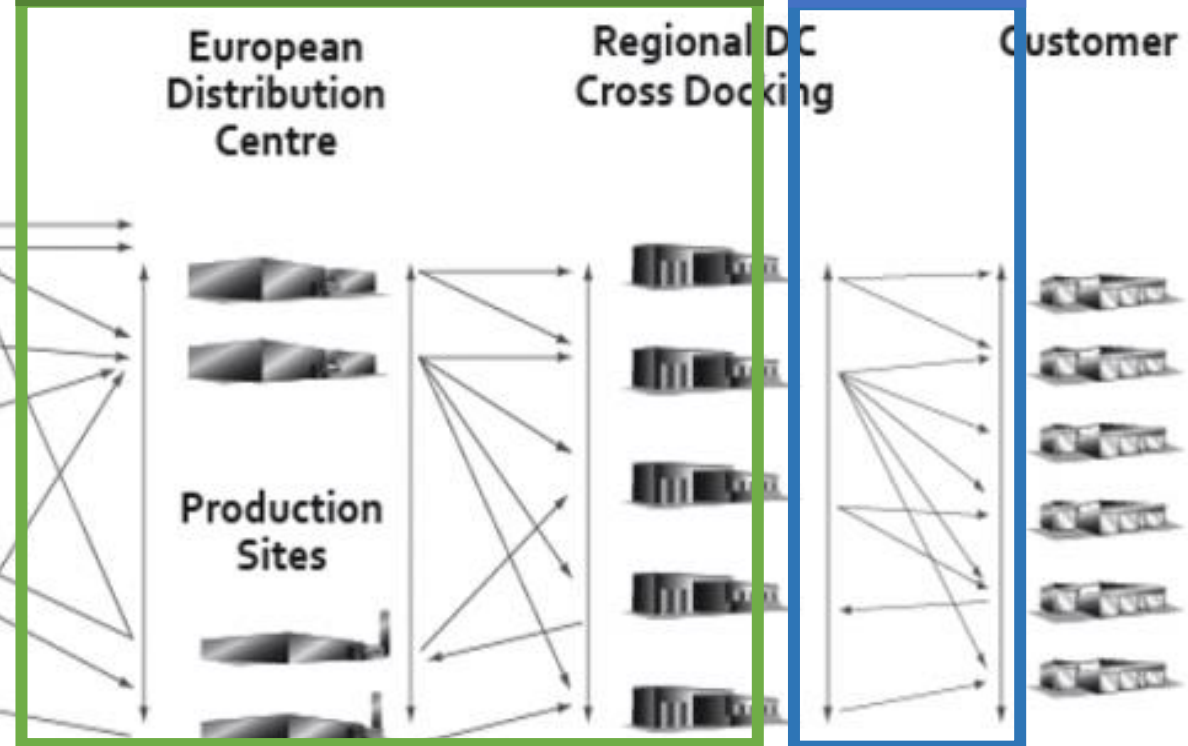
Role evolution from 2005 to 2025: From 2005 - 2015

Typical configuration of Global Supply Chains

SUPPLIER



ECOMMERCE RETAILER



POST

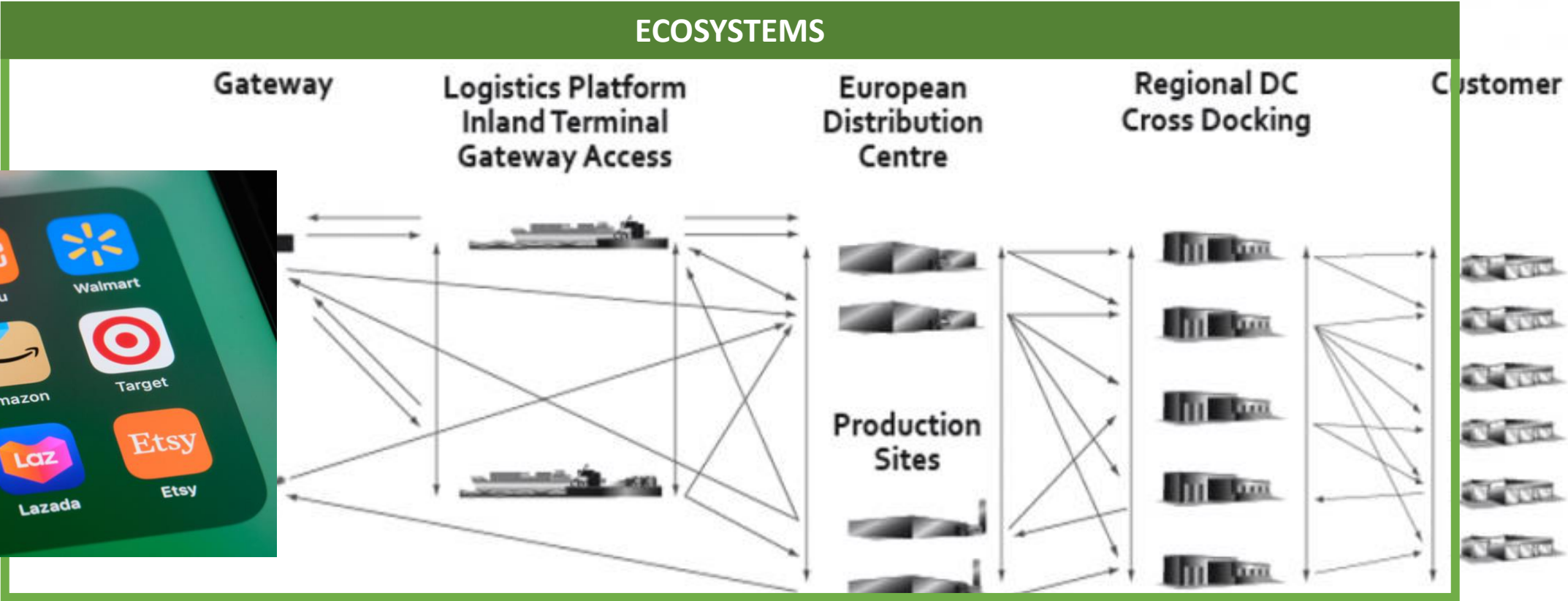




eCommerce and eCosystems

Role evolution from 2005 to 2025: From 2015 - 2025

Typical configuration of Global Supply Chains

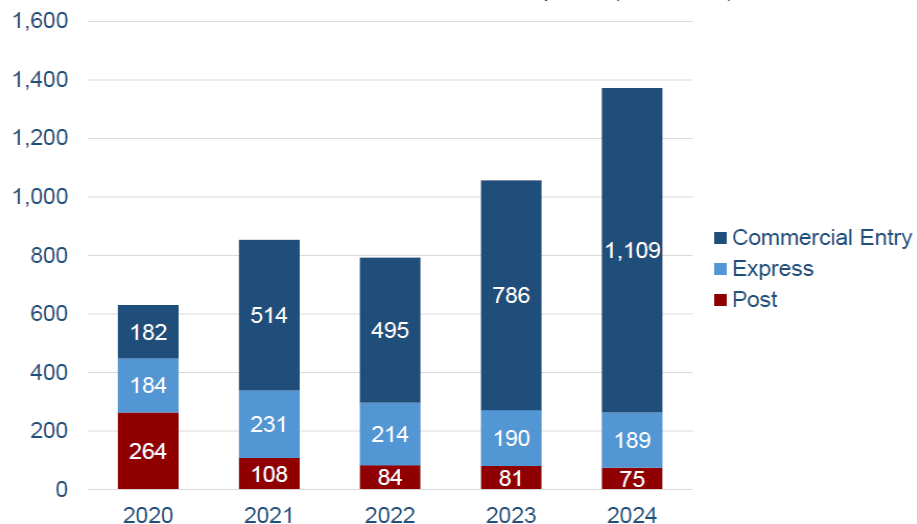




Cross-border e-commerce logistics transformation

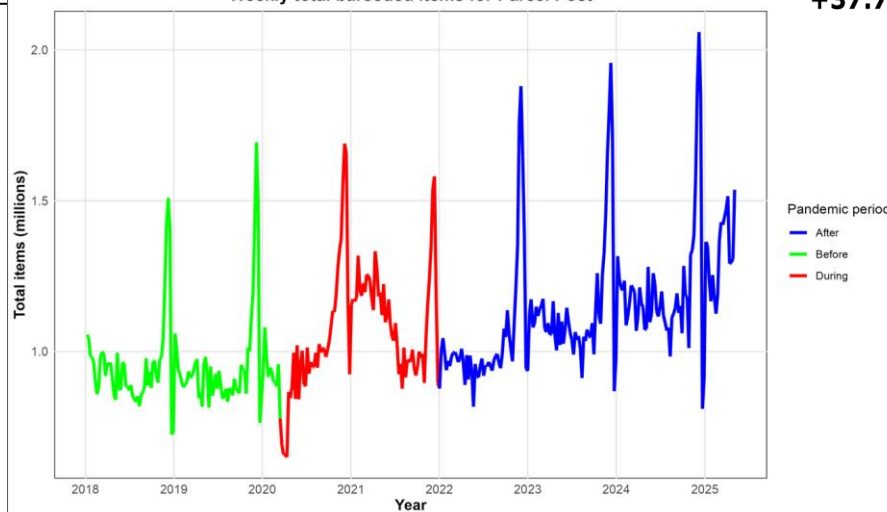
Increasing fragmentation across logistics channels is shaping the expansion of digital trade

United States: De Minimis imports (in million)



Source: WIK, US CBP

Weekly total barcoded items for Parcel Post



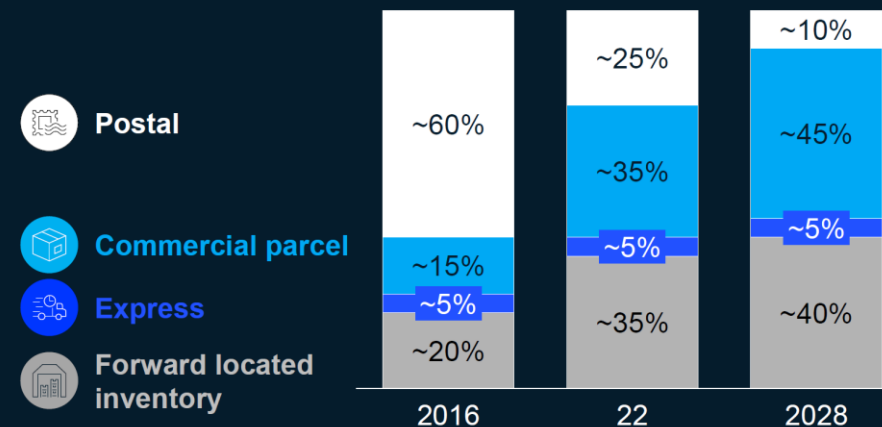
Source: McKinsey

Feb-May 2025
VS
Feb-May 2019
+37.7%



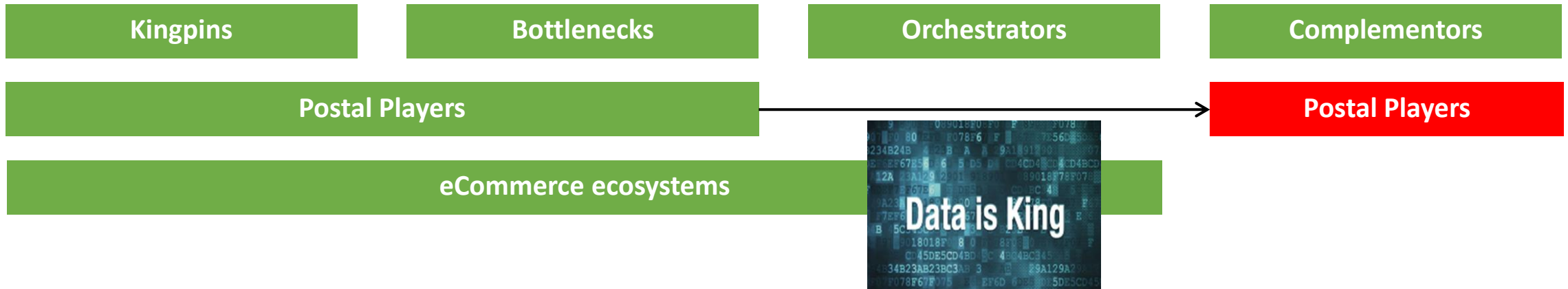
Cross-border by mode of delivery

% of foreign orders





The future of postal e-commerce



UPU - Strength in Unity
One World, One Network

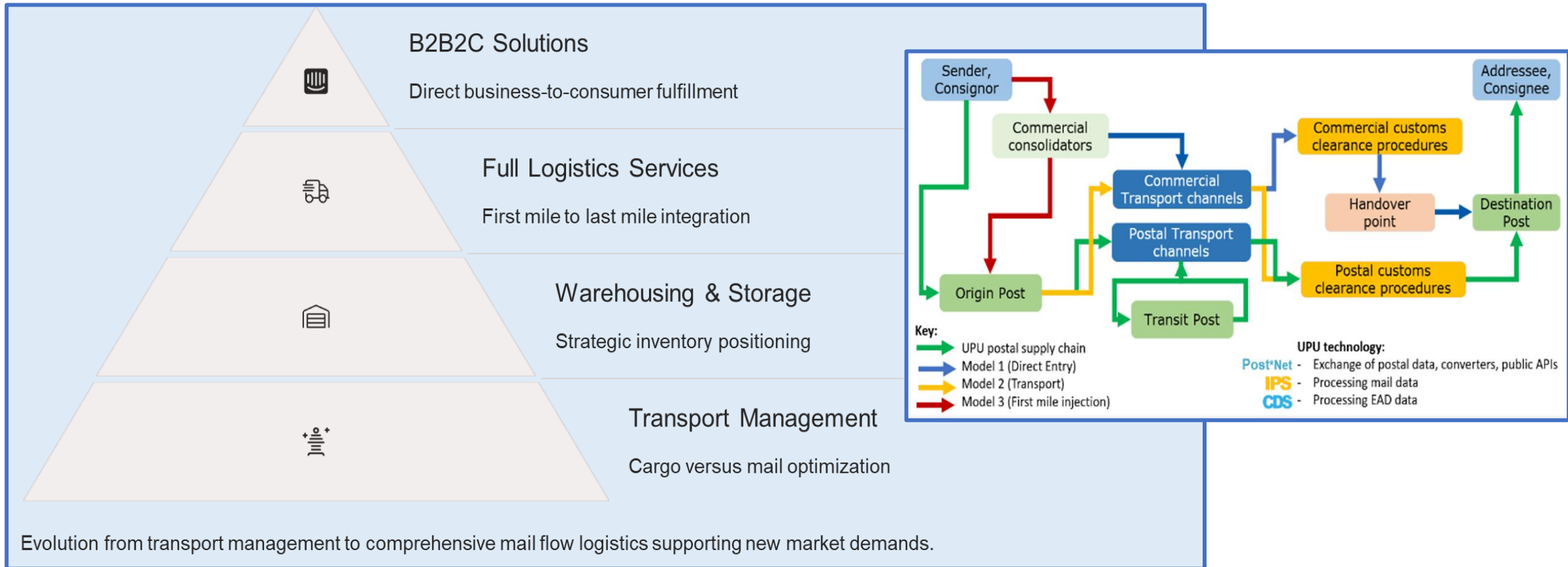
Creator of Addresses,
Government Backed,
Access to National ID's

Largest Last Mile network leading to high Consumer Trust & association





New mail business models/products?



Traditional Mail Model

Point-to-point delivery through postal networks

Hybrid Mail-Cargo

Combined processing leveraging both both postal and cargo infrastructure

Integrated B2B2C and D2C

End-to-end business solutions with warehousing and fulfillment services



UPU Initiatives to Support the Development of E-commerce

B2B2C and D2C Business models

Hybrid model utilizing the Electronic Advance Data model to enable smooth bulk goods transport. Proof-of-concept pilots are underway to test and validate the model

Delivered Duty Paid (DDP) Solutions

Prepay duties & taxes to simplify intl. e-commerce transaction flows. Collaborating with industry solution providers to implement plan, leveraging IT tools like the Customs Declaration System

UPU Readiness for Market Interoperability Framework

Aims to enhance cooperation between Posts and wider postal sector players through the new UPU initiative, fostering partnerships and driving innovation in the postal ecosystem.





Areas of cooperation between the UPU and IATA cargo carriers

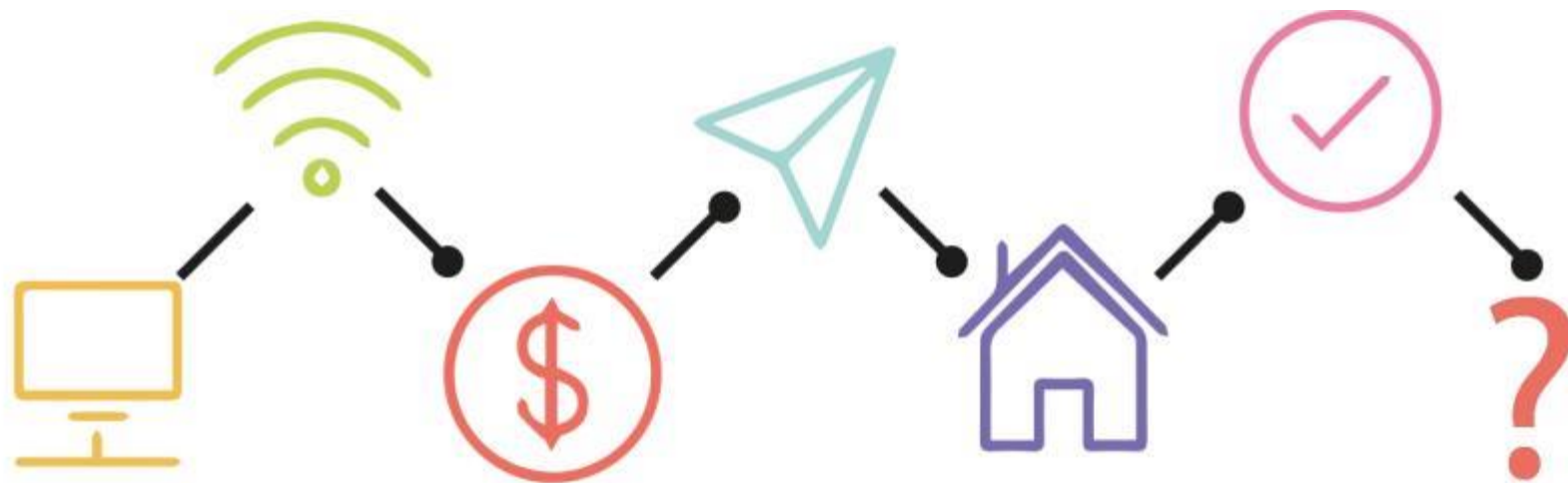


Digital transformation	Integrated logistics ecosystem	Security and safety	Regulatory alignment and sustainability
<ul style="list-style-type: none">• Data sharing approach for messaging (APIs)• Paper-free processes (transport, accounting, customs)• AI for compliance, risk assessment and routing	<ul style="list-style-type: none">• Interconnect postal and private networks through the joint ecosystem• PAWB for bulky mail• Expand # of cargo carriers in UPU mail transport• Establish regional UPU mail transport hubs	<ul style="list-style-type: none">• Share risk assessment data through IATA ONE Record and UPU DGST• Joint capacity-building activities (certification, training, webinars)• Adopt global (not regional) security standards	<ul style="list-style-type: none">• Collaborate with ICAO, WCO, CAAs) for harmonized regulations• Promote global e-commerce standards for customs and data• Reduce waste in operations





Thank You



INTEGRATING POSTS INTO THE WORLD OF E-COMMERCE

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