

Cargo Handling Standards

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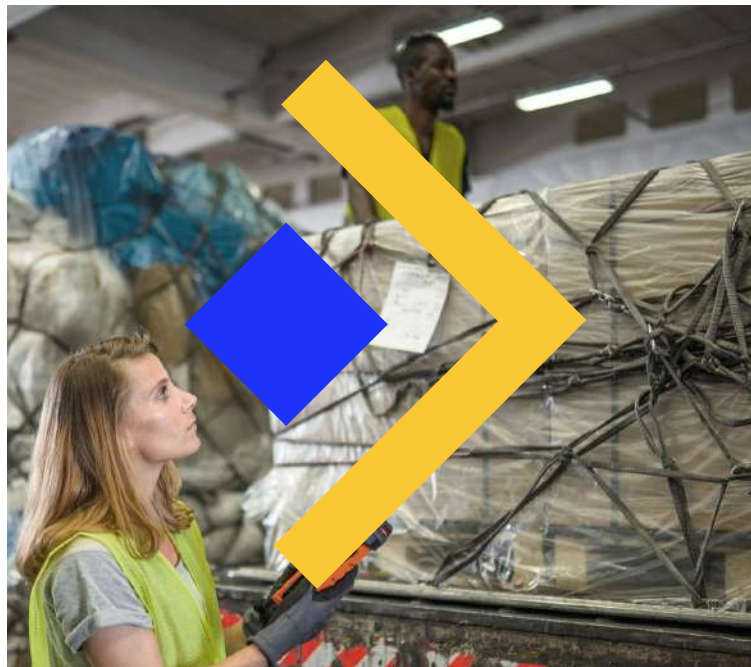


What are the industry priorities?



Digitalization

Streamline operations, enhance efficiency and transparency, while leveraging data to create new value-added services



Sustainability

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



Safety & Security

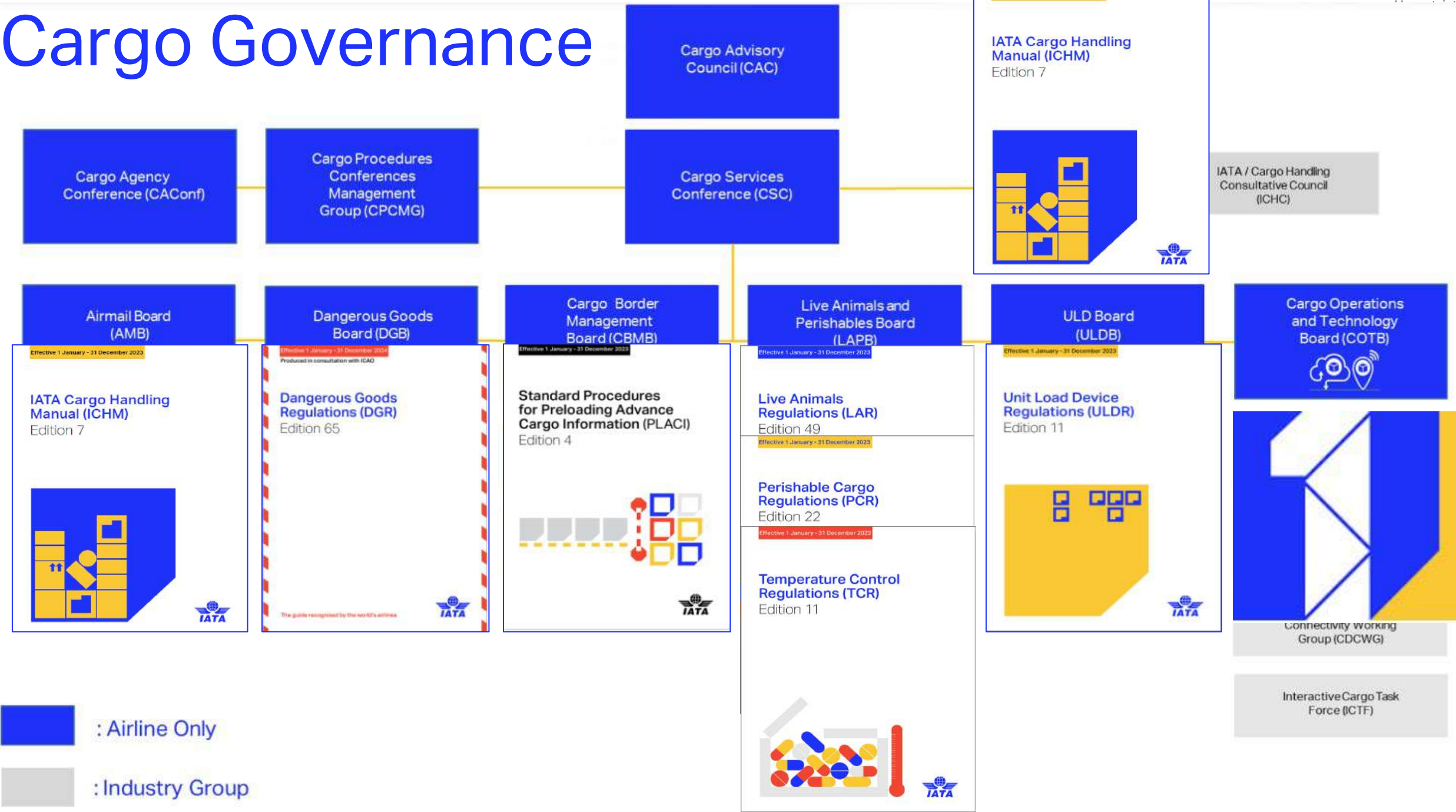
Ensure safe, secure and compliant transport of goods by adhering to the highest standards and best practices in the industry

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	- Digital Transport & Logistic Forum (DTLF) of the EU Commission - FEDeRATED Consortium	- ONE Record - Interactive Cargo - Cargo XML - Cargo iQ	- Cargo XML toolkit - EPIC
Sustainability	- Trade facilitation (WTO TFA) - Compliance with customs regulations / Risk assessment - Airmail & E-Commerce Logistics	- Live Animal - Perishable Cargo - Temperature Control - Cargo Supply Chain Waste / Single use plastics	- LAR, PCR, TCR, CTM - ONE Source - CCLPH - CargoIS, Cargo Direct Data - Cargo Consulting & Training
Safety & Security	- Fire Resistant Container / Fire Containment Cover - Compliance with Civil Aviation regulations and standards	- Dangerous Goods - Lithium Battery Shipping - ULD - Infectious Substances Shipping - Operations and Handling	- DGR, LBSR - ULDR - ISSR - ICHM - PLACI

Cargo Governance





IATA Cargo Handling Manual (ICHM)

IATA Cargo Handling Manual (ICHM)



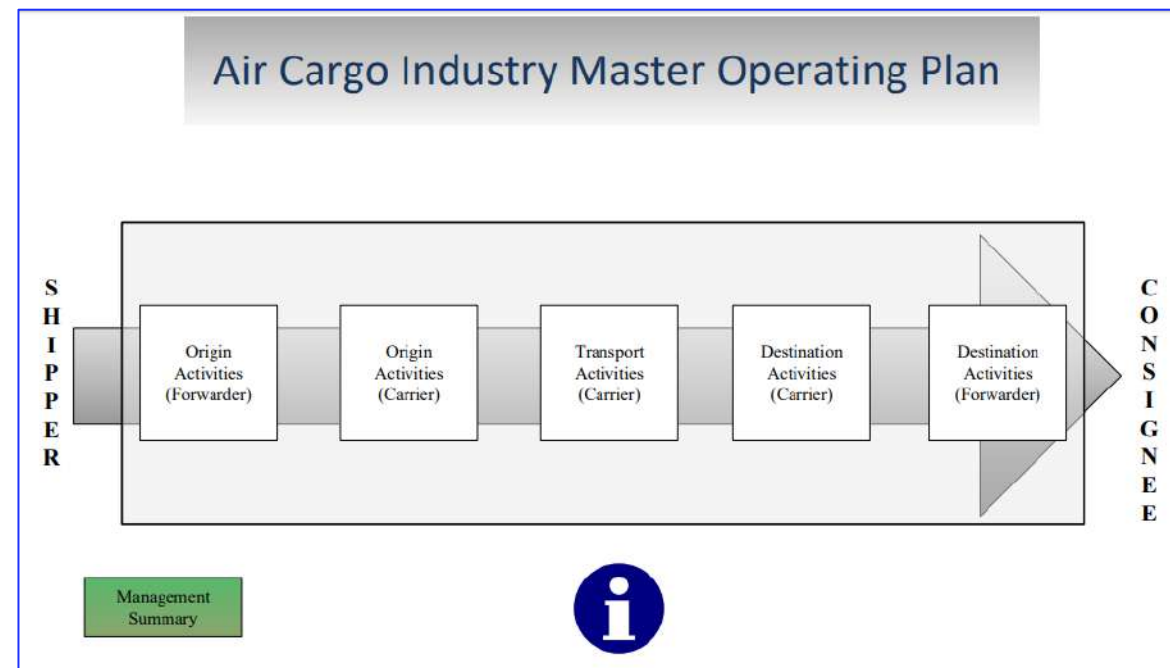
2017- ICHM 1st Edition is published
2025 – ICHM 09th Edition



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 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>

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.

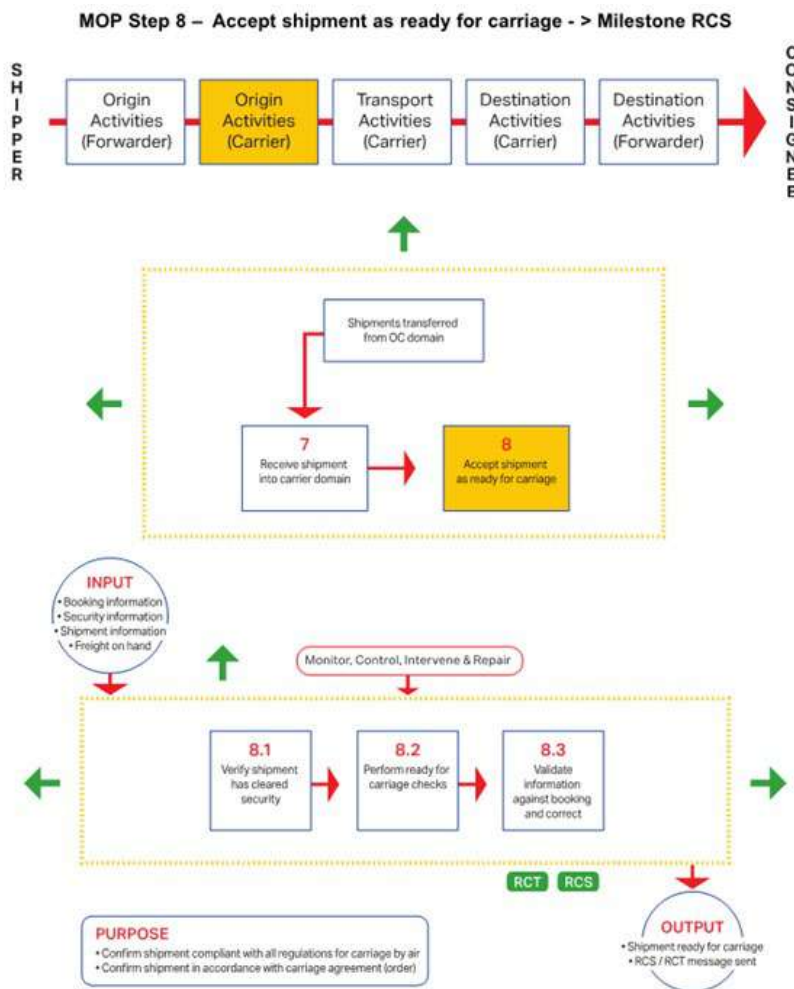
Operational Risk		Severity				
Probability		Catastrophic A	Hazardous B	Major C	Minor D	Negligible E
Frequent	5	5A	5B	5C	5D	5E
Occasional	4	4A	4B	4C	4D	4E
Remote	3	3A	3B	3C	3D	3E
Improbable	2	2A	2B	2C	2D	2E
Extremely improbable	1	1A	1B	1C	1D	1E

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	⚠	1. Unsecure cargo is a high risk for an airline, security status needs to be (re-)established
Data to be sent to and used by downline stations is insufficient or incorrect	⚠	2. Security data not available for downline stations—needs to be present or in the FWB
Shipment does not match the booking	⚠	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

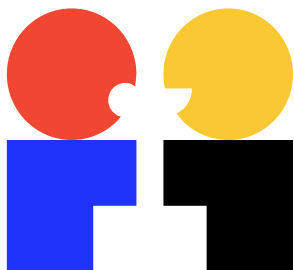
1. Always establish the security status of a shipment and, if applicable, relay the information as per RA regimes in the FWB message
2. Always make sure that the shipment documents match the actual booking
3. Never assume that all data is available, check for missing or incorrect SHC's

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.

ICHM Ed.9 – Enhanced Content on Freight Forwarders Activities

IATA and FIATA Collaborate to strengthen global air cargo standards with FIATA endorsement of ICHM.



<https://www.iata.org/en/pressroom/2024-releases/2024-09-23-01>

Master Operating Plan (MOP) in ICHM

Chapter 1	Book & Plan Shipments	Export
Chapter 2	Pick-up from Shipper	
Chapter 3	Receive Freight at Forwarder Branch Facility	
Chapter 4	Transfer to Forwarder Hub	
Chapter 5	Prepare Export Shipments	
Chapter 6	Transfer shipments to carrier domain	Import
Chapter 15	Handover the Freight to the Forwarder	
Chapter 16	Arrive Shipment at Forwarder Hub	
Chapter 18	Load Truck and Produce Run Sheet	

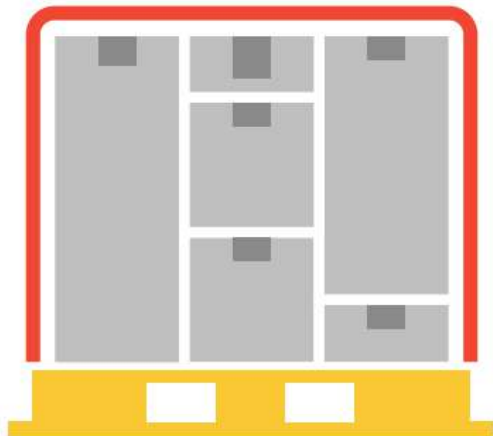
ICHM Ed.9 – Shipper Built ULD (SBU) Guidance





Single Use Plastic Products Reduction in Air Cargo

Plastic sheets & stretch wrap

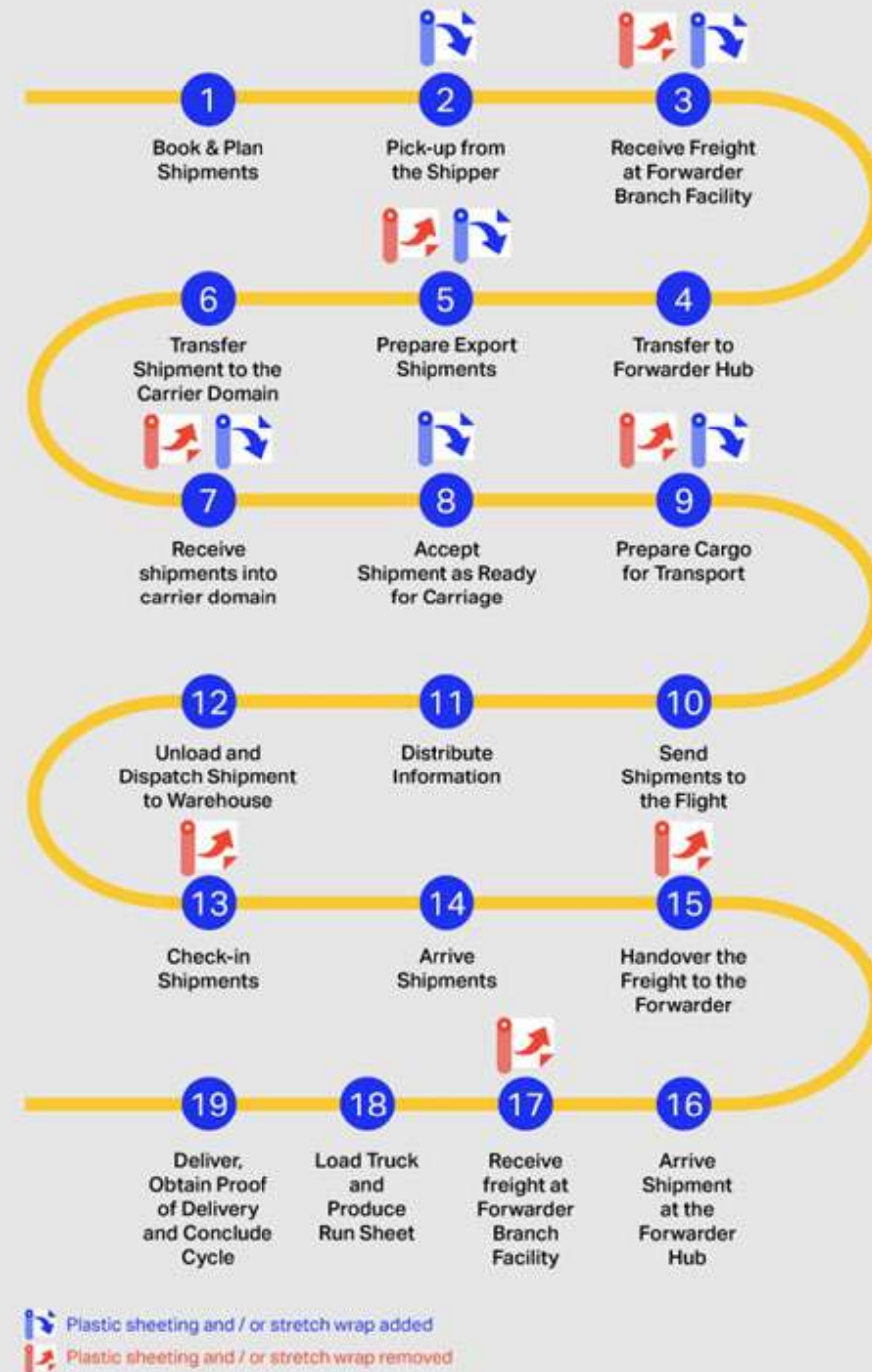
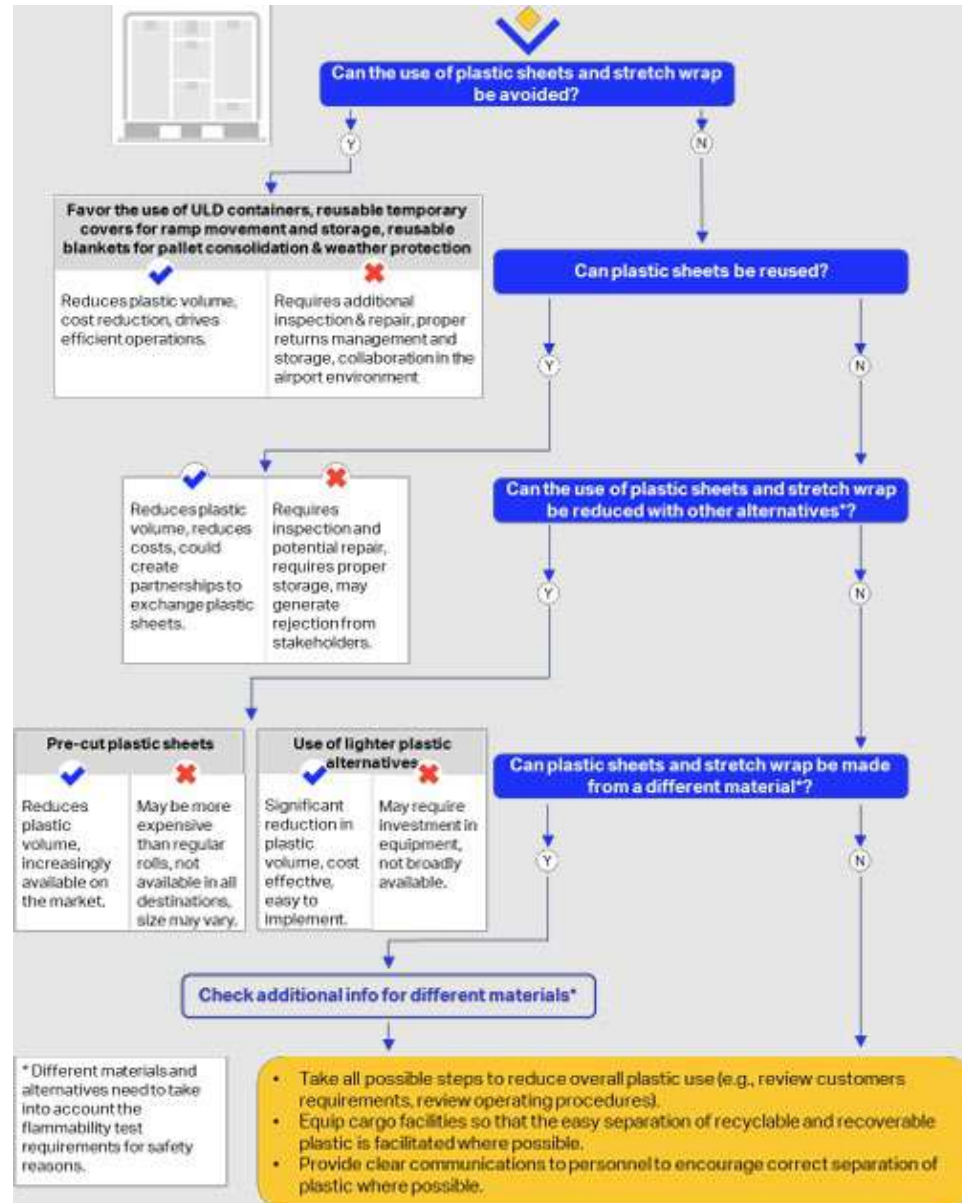


Download

ICHM Ed.9 – Single-Use Plastic Product (SUPP)



Decision Tree



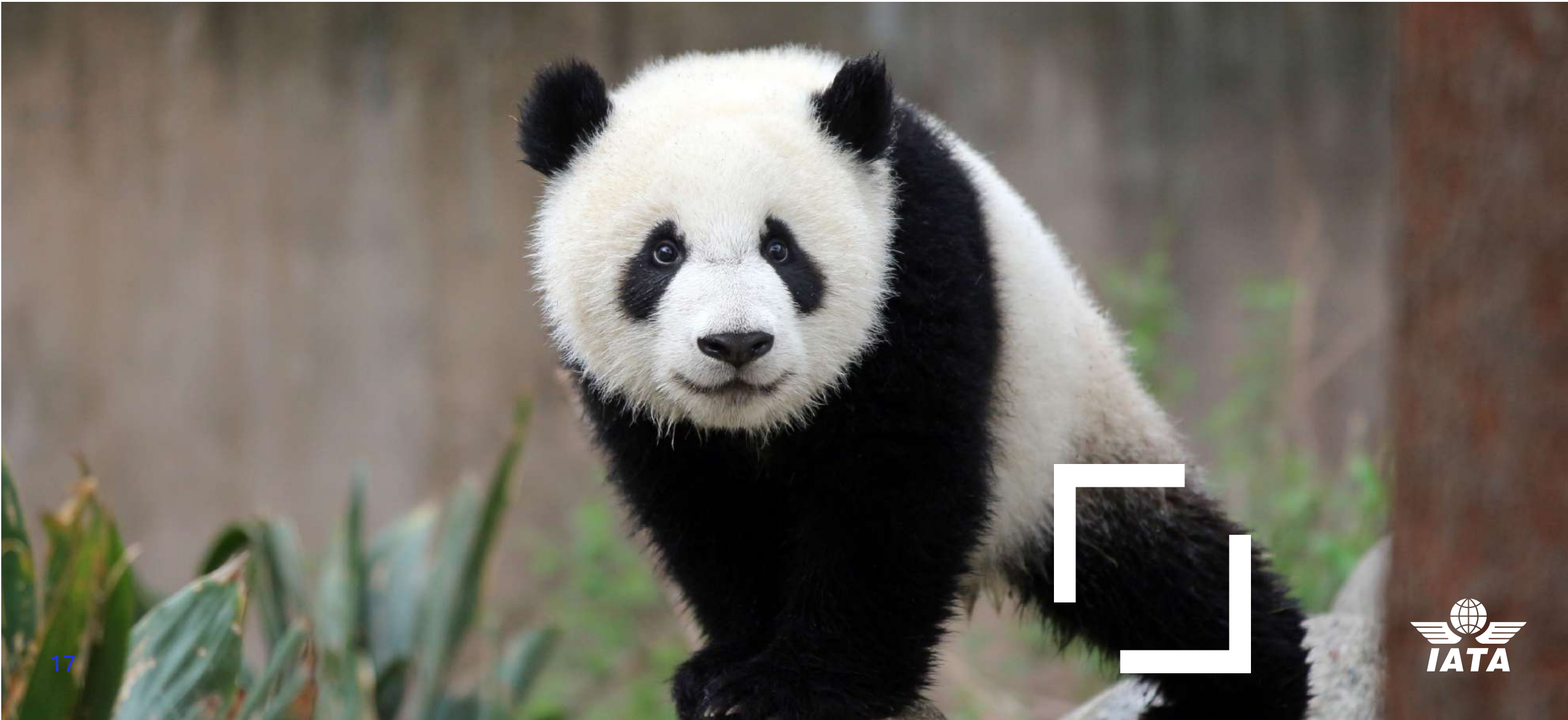
Special Cargo Regulations



Live Animals Regulations (LAR)



IATA data shows that there were close to 200,000 live animal shipments globally in 2024—up 11% since 2019 source IATA Cargo IS



Problems



Cost & Process Inefficiencies

- Process inefficiencies
- Labor and time intensive procedures
- Paper based processes
- Non-availability of up-to-date regulations & temporary embargoes

Compliance

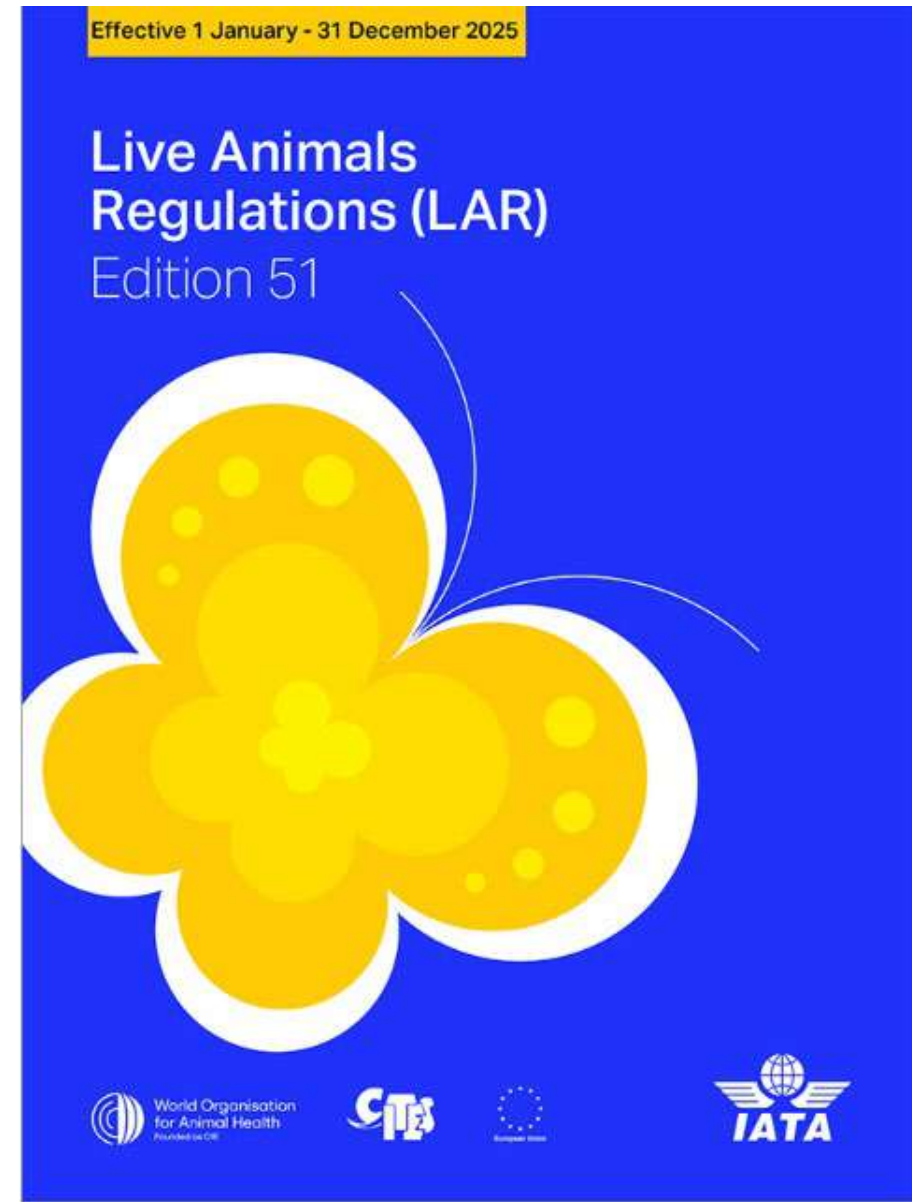
- Non-compliance with regulations
- Risk of errors
- Non-compliance penalties
- Reputational damage

Safety

- Endangerment of handling staff
- Health and welfare of animals
- Safety incidents

LAR Edition 51

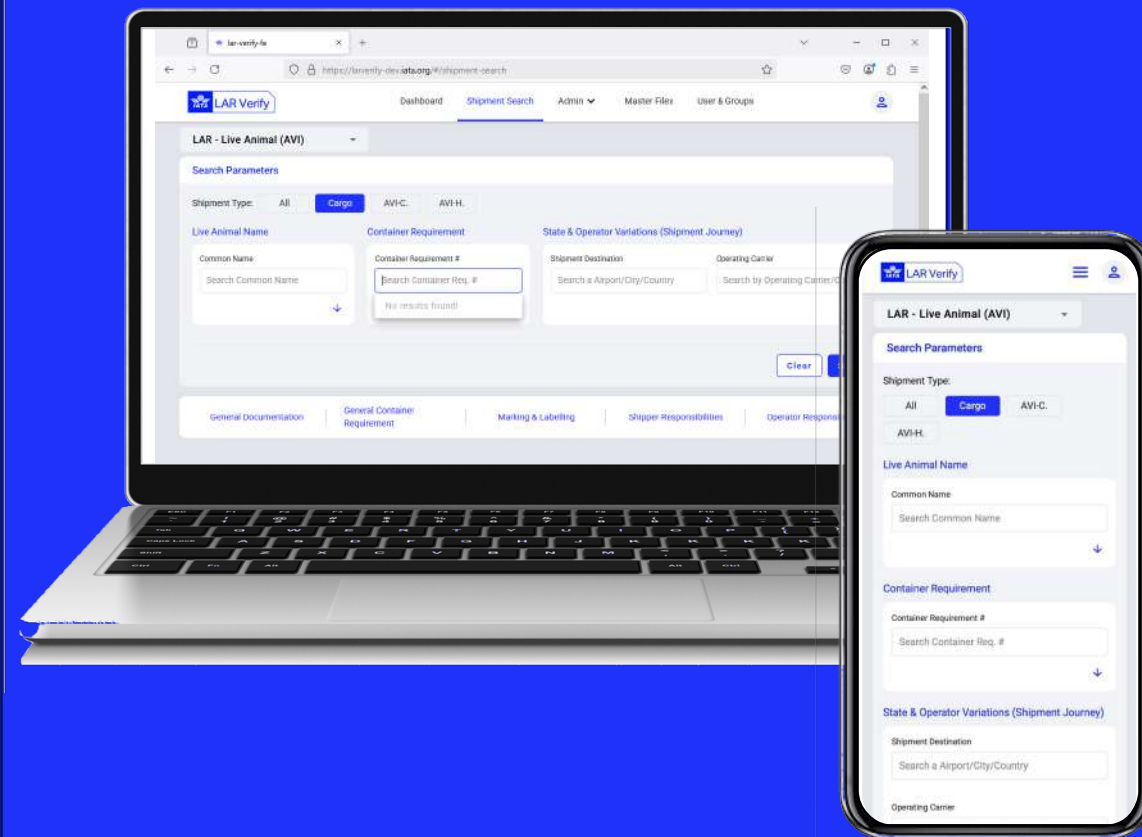
- LAR is the global standard for transporting live animals by air
- LAR ensures the safety, welfare and comfort of animals throughout the journey
- LAR covers over 4,000 species of animals, from dogs and cats to bees and crocodiles
- LAR is updated yearly with input from experts, industry and State Regulatory Authorities (MOUs with CITES, WOAH, ATA and WAZA)





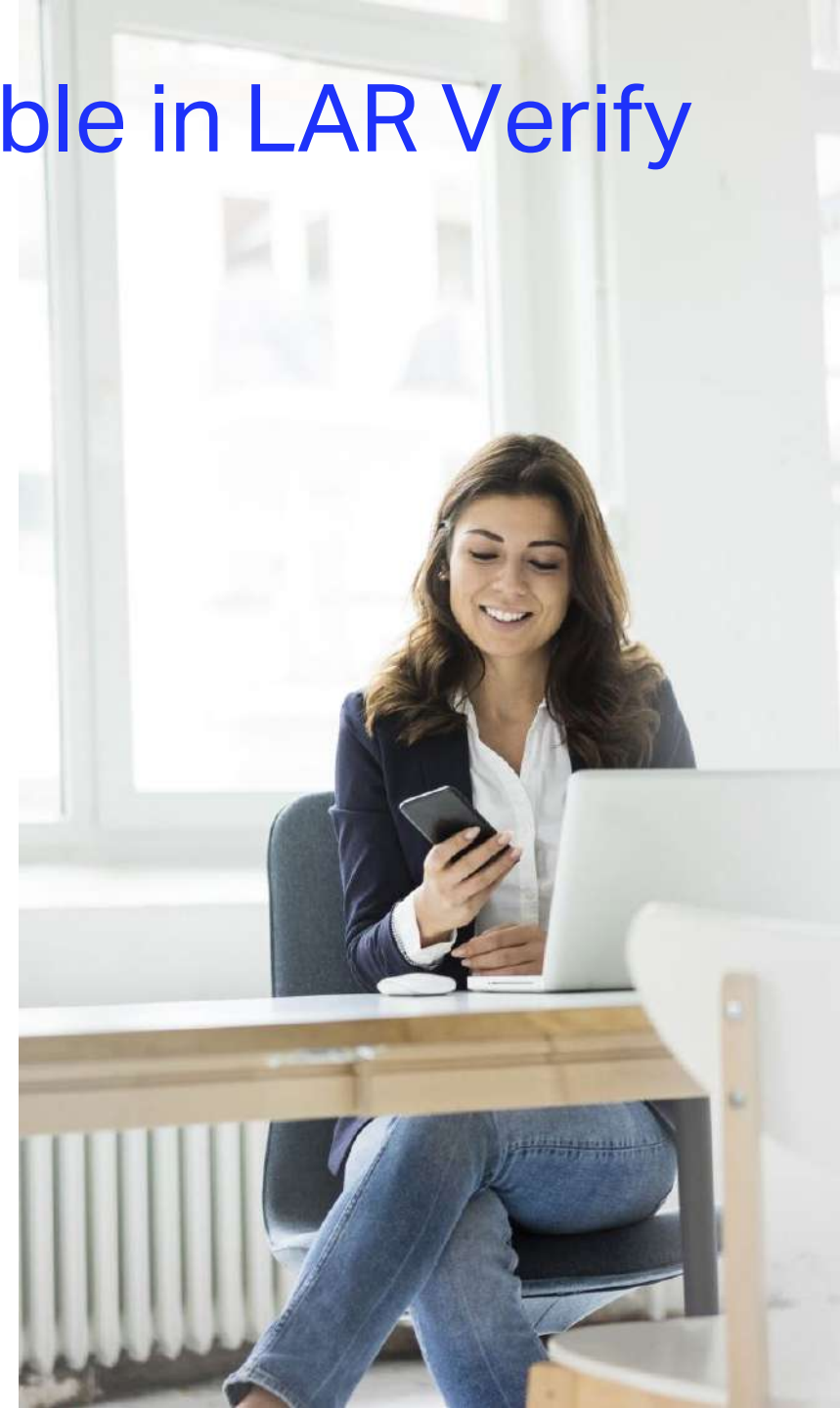
A trusted digital solution for compliant, humane, and reputationally secure, live animal transport.

www.iata.org/lar-verify



LAR Manual – 52nd Edition Now Available in LAR Verify

- Chapter 1: Shipper and Operator Responsibilities
- Chapter 2: State Variations
- Chapter 3: Operator Variations
- Chapter 6: Listing, Description and Sizes of Species
- Chapter 7: Documentation
- Chapter 8: Container Requirements
- Chapter 9: Marking and Labeling
- Chapter 12: Additional species consideration
- Appendix B-General Operator Information
- Appendix F–Acceptable Ambient Temperature Ranges for Live Animals



LAR Verify Feature Set

1. Check Regulations	Gain instant access to precise and concise regulations, restrictions, and embargoes for states and carriers. Ensure you're fully prepared with the required documentation for your live animal shipment.
2. Get Standards	Access global standards and technical specifications for your live animal shipment, including container requirements, animal classification, CITES compliance, marking and labeling guidelines, as well as shipper and operator responsibilities.
3. Regulators Map	Get an overview of states and carriers' live animal regulations through interactive maps. Stay up-to-date with the latest live animal regulatory and operational updates.
4. Empower Network	Empower your entire network with LAR Verify access while efficiently managing access for your hub and outstations.
5. Manage Dynamic Embargoes¹	Streamline the enforcement of seasonal or temporary embargoes throughout the network or at specific stations.
6. Validate Docs²	Have the required docs validated before submitting your shipment to the carrier or its handler.
7. Doc Pre-Checks³	Streamline compliance checks by reviewing the required shipment documents (scanned/PDF) in advance and providing a Go or No-Go decision to your customer.
8. Language Variety	Supports English, French, and Spanish, enhancing accessibility and user experience for a diverse global audience.



Interactive Map – Operator & State Variations

[Dashboard](#)
[Search Regulations](#)
[Embargoes & Restrictions](#)
[Admin](#)
[Reports](#)

[States](#)
[Operators](#)

States: 32

Variations: 165

62
 Container Requirements

1698
 Common Names

3068
 Scientific Names

Notifications (0)

No Data Available!

Live animal operation & regulation updates

LAR 52: See the Significant Changes to the New Edition link: www.iata.org/lar

IATA Traveler's Pet Corner for the Safe Transport of Dogs and Cats by Air link www.iata.org/pets

CA - Canada

↔

AU - Australia

🔍

LAR Verify - Result Summary

 LAR Verify

DashboardSearch RegulationsEmbargoes & RestrictionsAdmin ▼Reports ▼



LAR - Live Animal (AVI) ▼

Search Parameters

Search Results

Result Summary  Result Summary Overview 

SHC: AVI Cargo/Baggage: Cargo Animal Classification: Mammal Scientific Name: Canis familiaris Common Name: Dog (domestic) Destination: AE | United Arab Emirates (the) Operator: BA | British Airways Plc ⓘ CR: 1

 **Result Summary:** Your live animal shipment may be subject to applicable embargoes and restrictions **BA01** , **AEG04** , **BA03** , **BA05** , **BA07** , **BA10** . Refer to the detailed regulations outlined below.
Applicable Regulations:
Destination United Arab Emirates (the) (AE) : [Import Variations \(1\)](#) , [Embargoes & Restrictions \(1\)](#) and [Specific Documentation \(16\)](#)
Carrier British Airways Plc (BA) : [Variations \(3\)](#) , [Embargoes & Restrictions \(5\)](#) and [Specific Documentation \(3\)](#)

Type: Mammal(M) Common Name: Dog (domestic) Scientific Name: Canis familiaris

Scientific Name:	CR	Size of Adult	Acceptable Ambient Temperature Ranges		CITES
Canis familiaris	1	No Size information available	Minimum °C (°F)	Maximum °C (°F)	
			10 (-)	27 (-)	

General DocumentationGeneral Container RequirementMarking & LabellingShipper ResponsibilitiesOperator Responsibilities



LAR Verify

Visit Our Website: www.iata.org/en/services/compliance/lar-verify

For demo please contact larverify@iata.org

Perishable Cargo Manual (PCR)



Reducing Perishable Loss in Air Cargo

Edition 1 – Released 6 December 2023

Guidance on
Perishable Loss Reduction
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.



IATA Perishable Cargo Regulations

to transport compliant time & temperature-sensitive products

What's inside the PCR?

- **Applicability** (simplifying business and contractual considerations, shipper and carrier responsibilities, special conditions, compliance)
- **Government regulations** (compliance, government regulations and laws, variations by country)
- **Carrier regulations** (variations by carrier)
- **Perishable facts and types** (types of perishables)
- **Packaging** (air shipment requirements, package categories)
- **Perishables operations** (quality and risk management, booking, acceptance, cargo and ground operations, delivery)
- **Documentation and labelling** (waybill, cargo handling codes, captain notification, marking, labelling)
- **Traceability and tracking** (general information, RFID)
- **Claims** (types, how to inspect, how to study, check list)
- **CITES** (guidelines for live plants, CITES parties, appendices, management authorities by country)
- **Air transport of cut flowers** (maintaining quality in ornamentals, factors affecting post-harvest quality, post-harvest management, quality control, air transport logistics)



Temperature Control Manual (TCR)



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.



IATA Temperature Control Regulations

information to transport compliant time & temperature-sensitive products

What's inside the TCR?

- **Applicability** (shipper and carrier responsibilities, special handling conditions and transport conditions, compliance)
- **Government regulations** (compliance requirements, variations by country)
- **Carrier regulations** (general information, requirements and carrier variations)
- **Pharmaceutical facts and product types** (temperature levels, market trends, product categories, biomedical research)
- **Packaging** (general information, types and categories of packaging)
- **Documentation and labelling** (specific documents, handling codes, labelling, marketing, WHO vaccine references)
- **Acceptance and control** (processes, hazard analysis, cold chain management, handling information)
- **Traceability and tracking** (general, RFID)
- **Air transport logistics** (service levels, temperature ranges, packaging technology, risk factors, critical control points, temperature mapping, healthcare labelling, quality management, environmental considerations)



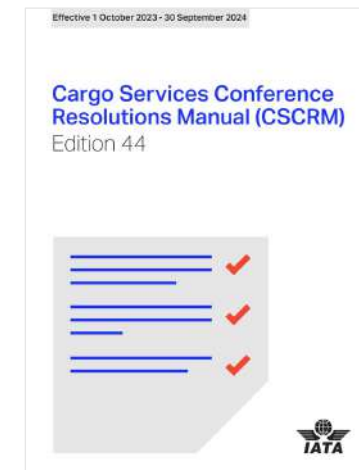
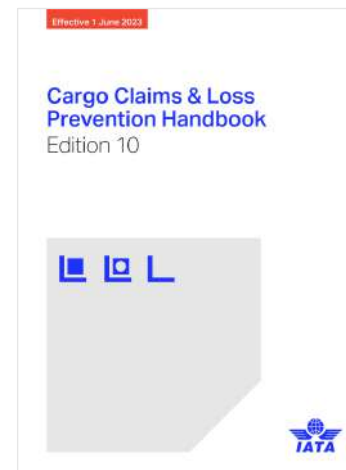
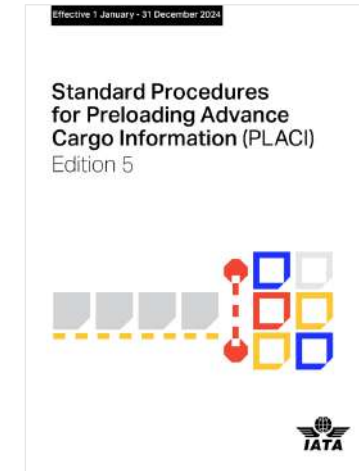
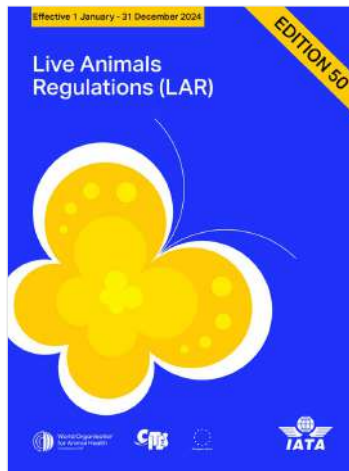
Guidance for Vaccine and Pharmaceutical Logistics and Distribution

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

IATA Cargo Publications



Reach out to us pubsupport@iata.org



Thank You

Air Cargo is performed at thousands of Airports by hundreds of Handlers.

Standardization is key to provide our customers a harmonized level of services.

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