IATA Cargo Strategy

July 2017

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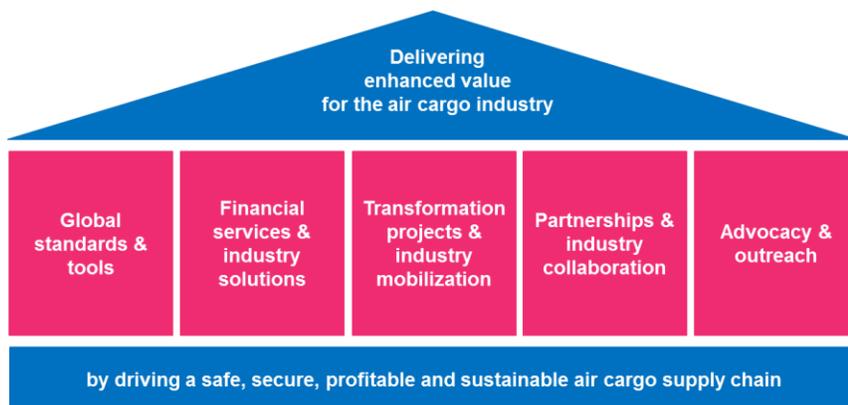
Executive summary

IATA is the trade association representing approximately 265 commercial airlines worldwide, accounting for more than 83% of total air traffic. IATA's mission is to represent, lead and serve the airline industry.

Air cargo represents more than 35% of global trade by value. When it comes to combined passenger and cargo airlines, the cargo business generates 9% of airline revenues on average, representing more than double the revenues from the first class segment.

To support this critical business, IATA is committed to: *deliver enhanced value for the industry by driving a safe, secure, profitable and sustainable air cargo supply chain*.

Delivering enhanced value for the air cargo industry

| Global standards & tools | Financial services & industry solutions | Transformation projects & industry mobilization | Partnerships & industry collaboration | Advocacy & outreach |

by driving a safe, secure, profitable and sustainable air cargo supply chain

IATA develops global standards and tools, offers financial services and industry solutions, drives transformation projects, creates partnerships, and runs campaigns, advocacy and outreach activities.

The IATA Cargo agenda is shaped by the IATA Cargo Committee.

It addresses the 4 areas of focus and 10 industry key priorities:

- Safety & Security
- Visibility & Digitization
- Industry Management & Business Transformation
- IATA's Value Proposition

1. Enhancing safety
2. Improving security
3. Facilitating trade
4. Strengthening air cargo's value proposition
5. Driving efficiency with global standards
6. Modernizing air cargo
7. Improving quality
8. Protecting cash
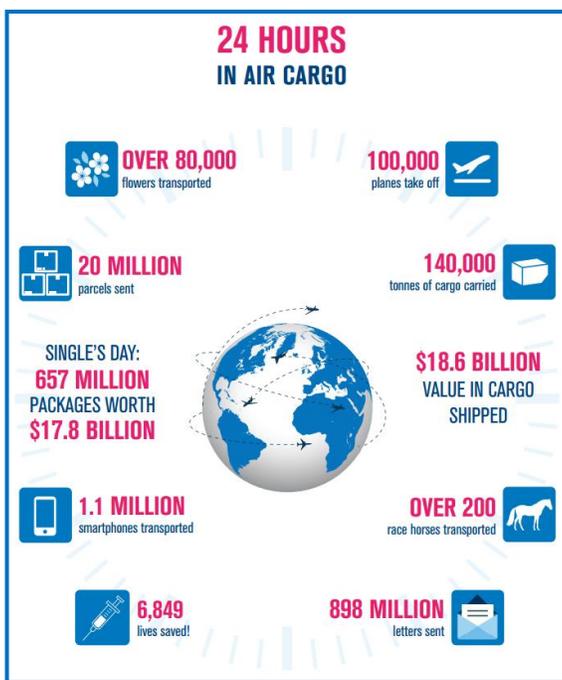9. Strengthening partnerships
10. Building sustainability

why?

Understanding our business environment

Air cargo, crucial enabler of the global economy

35%

global trade by

value

Air transport is vital for manufactures trade, particularly trade in components which is a major part of cross border trade today. IATA forecasts that the value of international trade shipped by air this year will be USD 5.5 trillion, representing less than 1% of world trade by volume, but over 35% by value. That is equivalent to USD18.6 billion worth of goods every day.

Air cargo is essential to many facets of modern life. Moving **perishable** goods from one side of the world to the other would not be possible without air transport.

24 HOURS IN AIR CARGO

OVER 80,000 flowers transported

100,000 planes take off

20 MILLION parcels sent

140,000 tonnes of cargo carried

SINGLE'S DAY: 657 MILLION PACKAGES WORTH $17.8 BILLION

$18.6 BILLION VALUE IN CARGO SHIPPED

1.1 MILLION smartphones transported

OVER 200 race horses transported

6,849 lives saved!

898 MILLION letters sent

The **pharmaceutical** industry relies on air transport for its speed and efficiency in transporting high-value, time and temperature sensitive cargo, particularly vaccines. USD12 billion is spent worldwide on cold chain biopharma logistics. By 2020, it is estimated that this will rise to USD16.7 billion.

In today's world, carriage of **live animals** by air is considered the most humane and expedient method of transportation over long distances.

Most people have personal **electronic devices** that were built using a global supply chain linked by air.

Amazon, Alibaba, eBay and other **e-commerce** companies rely on the **express** delivery services made possible by aviation to get those devices, and so much more, to their customers.

Transportation of letters decreased from 340 to 328 billion letters globally, whereas the number of **postal parcels** grew from 6.7 to 7.4 billion. The best example is China's famous "Single's day" where in just one day, online shoppers bought goods worth USD17.8 billion, representing 657 million packages, and air transport plays an essential role in their delivery. In 2016, online retail sales only represented 7.6% of global sales, which shows a huge potential for growth in the years to come.

More on #aircargomatters on IATA website

The air cargo outlook: optimism is in the air

+3.8%

volumes growth
in 2016 compared to 2015

After several years of virtually no growth, demand, measured in freight tonne kilometers (FTKs) grew by 3.8% in 2016 compared to 2015. This was nearly double the industry's average growth rate of 2.0% over the last five years. Freight capacity, measured in available freight tonne kilometers (AFTKs), has increased by 5.3% in 2016.

All regions, with the exception of Latin America, experienced positive freight growth in 2016. Carriers in Europe accounted for almost half of the total annual increase in demand.
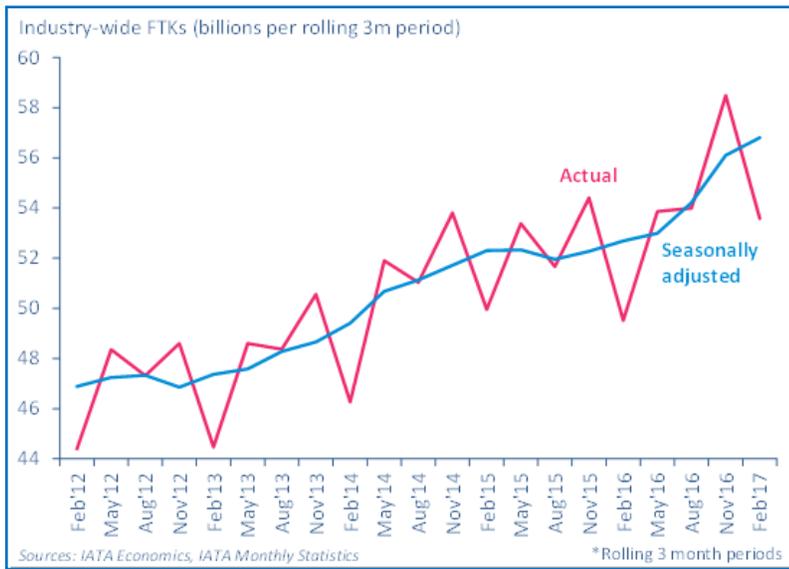
Freight volumes began to grow in the second half of 2016. A strong peak season, an increase in the shipment of silicon materials and a turnaround in new export orders contributed to the later uptick in demand.

And the ***upward momentum*** in traffic appears to have continued. Annual growth in global FTKs made a robust start to 2017 (6.9% year-on-year in January).

There are some positive forces supporting growth.

- ***Export orders*** are strong. That's a welcome development after world trade has essentially flat-lined for the last several years.
- ***E-commerce***, which depends heavily on air cargo, is growing at a double digit rate. The world continues to transform into a global cyber-store. Customers in the internet age are demanding almost immediate fulfillment of their orders.
- ***High-value specialized cargo*** is also showing great potential. The total global pharma market is expected to reach USD1.12 trillion by 2022, creating significant opportunity for air cargo. A substantial part of this market is the transport of temperature-sensitive healthcare goods such as cold chain drugs and biopharma products - typically shipped by air.

The SWOT analysis of the air cargo industry

Air cargo SWOT highlights a number of very significant weaknesses and challenges which must be addressed in order to further leverage the industry's strengths and successfully secure the opportunities that will arise.

Strengths

Best mode for land-locked countries

Low land occupancy

No path congestion

Speed

Safety

No competitor for high value goods in the long ranges

Reliability

Security

High level of expertise for special cargo

No theft

Weaknesses

Complexity

Not intermodal

Weak economics of most carriers

Perceived as not environmentally-friendly

Perceived as not price competitive

Security (compliance to multiple regulations)

Over-capacity

Lack of attractiveness for young talents

Lack of relationship with end-customer (shipper/consignee)

Slow adoption of new technologies

Lack of investments to innovate

Value not explained properly

Lack of transparency & communication between stakeholders

Spatial mismatch in door-to-door chain

SWOT analysis for Air Cargo

Opportunities

Unregulated supply chain participants

Market liberalization

e-Commerce growth

New technologies: digital platforms, internet of things, big data, automation etc.

Bali Agreement

Urbanization (mega-cities)

Drones

Capacity increase in extra-European airports

New logistics concept

Growth of economy & trade

Alternative fuels, solar power, etc.

Will to better collaborate as an industry

Threats

Increased regulatory oversight on aircraft loading

New players (Amazon, Alibaba, etc.)

Unregulated supply chain participants

Inadequate security

Trade protectionism

In-flight fires

Airport congestion

External shocks

On-shoring, near-shoring trends

Other & new modes

Night restrictions

Terrorism

Fuel costs

Ground waiting times (clearance)

Crowd shipping

Speed, the first value proposition

134 hours door-to-door

The last two IATA Global Shippers' Surveys conducted in 2015 and 2017 showed that the number one selling point of air cargo transportation as seen by shippers is speed.

Air cargo is the fastest mode of transport, as shown by data, collected through Cargo iQ: on average air cargo shipments take 134 hours to get from shipper to consignee, including 44 hours in the hands of airlines.

However, the demand for efficient supply chains is pushing other modes of transport to improve their lead times and compete with air cargo on that front.

e-Commerce growth, the not-to-be-missed opportunity

The fast development of connected technologies, including mobile devices in the past few decades has changed many aspects of consumers' lives, including their purchasing process. Consumers are often turning to e-commerce: online shopping (B2C), where private customers can order various products which they then receive by courier or postal mail; online transactions from consumer to consumer (C2C), as in the example of eBay or other similar websites, and B2B e-commerce between companies.
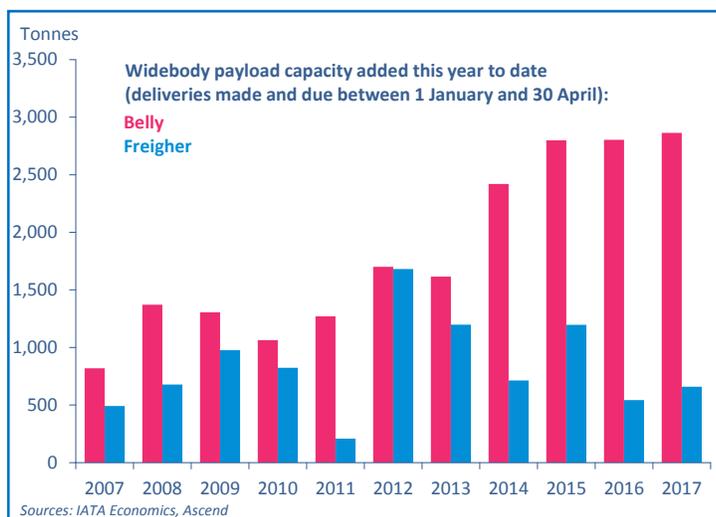
The explosive growth of e-commerce has already had a profound effect on retailers and manufacturers as manufacturers seek to reach their customer as quickly and cost-effectively as possible. And this is just the beginning!

USD 3.5 trillion: it is the global e-commerce revenue forecast for 2019. 7.6%: it is the part of online retail compared to global retail sales. 66%: it is the growth of e-commerce from Asia Pacific to Europe between 2013 and 2015. Those figures show the huge potential of e-commerce in the near future.

Changes are therefore needed in our industry to address the evolving expectations and to capitalize on e-commerce growth: end-to-end track & trace, reliability in delivery time, smooth cross-border operations; to mention just a few.

Over-capacity, the structural challenge

Over-capacity is coming mainly from an expansion of the passenger business as well as an increase in the freighter fleet. Additional payload from widebody belly capacity has continued to exceed that from freighter-only fleet.

Tonnes

Widebody payload capacity added this year to date (deliveries made and due between 1 January and 30 April):
Belly
Freigher

Sources: IATA Economics, Ascend

Dedicated freighters remain an essential part of air cargo as certain factors, such as the departure and arrival times, type and size of cargo, and difference between cargo and passenger destinations limit the use of belly cargo.

A moderation in freight capacity growth, combined with an upward trend in demand, has

underpinned a rebound in the seasonally-adjusted industry-wide freight load factor. The load factor has risen by three percentage points since its low in early-2016, and is now closing in on the 45% level that was typical over the 2012-2014 period.

Trade agreements and trade protectionism

Trade protectionism has an increasingly damaging impact on world trade. Additionally, changes in the global political landscape with new administrations threatening to increase protectionist measures is a concern.

1'263
trade restrictive measures

The rising protectionist rhetoric on trade is adding to an environment of policy uncertainty. Vigilance and close monitoring of the trade policy environment remains essential. According to the World Trade Organization (WTO), of the 1,671 trade restrictive measures recorded in G20 economies since 2008, 408 have been removed by mid-October with the total number still in place standing at 1,263. The rate at which trade restrictive measures are added has slowed over the latest reporting period (May – October 2016) to 17 per month compared to almost 21 per month in the previous period. During the same time period governments implemented trade-facilitating measures at a rate of 13 per month. The numerical counting of the trade measures does not provide a complete picture of the extent of these measures nor their impacts. Two key developments in international trade policy point to an improving trade environment. The plurilateral expansion of the Information Technology Agreement (ITA) agreed to in December 2015 received a major boost on 26 October 2016 when China committed to implementation. The expansion of the ITA is significant because it reduces tariffs for IT products that are often transported by air. The other critical positive development is the entry into force of the Bali Trade Facilitation Agreement (TFA).

Read the IATA Bali Trade Deal Impact on Air Freight report for more information.

It is hoped that agreements such as the TFA will assist in reversing this trend. The document contains significant trade facilitation requirements and recommendations with regard to customs operations. These are intended to lead, in time, to important reductions in the cost of trade through actions in four main areas:

- Transparency within the government to promote openness and accountability
- Simplification to eliminate all unnecessary duplications in trade procedures, and to enable automation of cargo processes

- Harmonization of national regulations and procedures with international conventions and agreements
- Standardization of international processes and practices, documents and information agreed by various recognized international bodies

Read the Global Value Chain report for more information.

Greater transparency within governments and the resulting improved predictability, as well as harmonization and standardization of procedures will all have a positive impact for the air cargo industry. A recent IATA commissioned study showed that a 1% increase in air cargo connectivity was associated with a 6.3% increase in a country's total trade.

Competition with new players and other modes of transport

Mode mix optimization and modal shift from air to less-expensive or perceived more-environmental friendly maritime and rail transport has been occurring for some years. Freight forwarders offer more air/sea, air/road or air/rail products that combine to create price and total shipment time flexibility. Today, it is the new railway and road-based 'Silk Road' network that connects China with Europe that is capturing business from sea and air cargo. Tomorrow, it may be the Hyperloop One, currently being considered for application within the Gulf region.

"Amazon.com plans to schedule more than 200 flight departures and landings per day at a $1.49 billion cargo hub it is building near Cincinnati", as mentioned in the news in February 2017. It seems that Amazon plans to supplement existing logistics services, cuts costs and speed up delivery. The scale of its air cargo deals (leasing 40 Boeing 767 planes, new cargo hub with more than 100 parking space for planes) indicates Amazon's air cargo business is more than a trial service.

It is important to highlight that Amazon's air cargo plans began in earnest in only early 2016. It demonstrates the pace of changes happening in our industry. Big retailers such as Amazon, Alibaba and Walmart, are well positioned to disrupt the parcel industry. They first focused on building out their last-mile delivery and logistics services but are increasingly going after the middle- and first-mile of the transportation chain.

Change is in the air: listening to customers

7/10

Shipper's satisfaction

For the world, air cargo is a vital motor of the global economy. But to many airlines, the bottom-line value is falling, while shippers are saying that they don't receive enough value for money. Last two Global Shipper's Surveys, in 2015 and 2017, revealed that air cargo rated an average satisfaction score of 7 out of 10, a number that our industry should aim to drive upward.

The air cargo industry continues to face challenges of sustainability, profitability and customer satisfaction. It is far from being immune to global shocks such as Brexit. Competition is stronger than ever with other transport modes such as shipping and rail offering new products. Customers are also looking at mixing transport options to balance costs and speed.

In parallel, the industry has been slow to adapt to an increasingly electronic world that demands more transparency, speed and efficiency. Global implementation of electronic airway bill to date is less than 50%. Each day millions of pieces of paper airway bill are exchanged across the supply chain increasing the chance of error, reducing the efficiency of the process and causing customers and partners numerous pain points and poor quality of service.

Our challenge, therefore, is to increase the efficiency and service quality of air cargo. This is why in 2016 IATA launched the Simplifying the Business of Air Cargo program, StB Cargo, modelled on the successful Passenger program establish for some years. StB Cargo is a portfolio of transformational projects addressing existing issues and an innovation framework to foster long-term thinking.

At the heart of StB Cargo is the need to make air cargo easier, smarter and faster. The 6 goals of StB Cargo are the following:

Modernizing cargo distribution

Capitalizing on e-commerce

Optimizing the end-to-end journey

Moving to data on-demand

Developing real-time interaction

Making quality relevant

what?

Setting the industry priorities

10 industry priorities

Enhancing Safety

Safety remains the **first priority**! Regulations, standards, training, workshops… are developed and maintained to ensure aircraft, passengers, crew are safe.

Improving Security

Equally critical is that security measures be **efficient and effective**.

Protecting Cash

Commercial aviation is a highly integrated, global network of thousands of companies and organizations. That network depends on **reliable**, **efficient**, and **secure systems** to report, collect, and remit funds between the different parts of the value chain. IATA Settlement Systems are the backbone of the global air transport system.

Driving Efficiency with Global Standards

The air cargo industry relies on global standards, developed and maintained through a **robust governance** mechanism, for the **efficient** handling and transport of cargo, the exchange of data, the settlement systems, etc.

Facilitating Trade

The air cargo industry needs **smart regulations** to facilitate trade, ensure safety and compliance. The effect of increased regulations, if not managed by the industry, will not only dramatically increase costs, but will also slow down transit times, damaging the value proposition of air cargo as a quick way to transport goods.

10
industry priorities

Improving Quality

The air cargo industry needs to create and implement quality standards from end-to-end to improve the **reliability** and **consistency** of its services.

Strengthening Partnerships

Our success can only be achieved through **collaborative efforts**. Therefore IATA is committed to developing partnerships with all supply chain industry stakeholders, like national & international organizations, regulators, non-governmental organizations, global, regional and local stakeholders' associations, aviation manufacturers and solution providers.

Strengthening Air Cargo's Value Proposition

Air cargo customers are not satisfied enough. Their needs, expectations and constraints have changed. Air cargo has to **evolve** as well to adapt and improve its value proposition. It is time to **strengthen today and build tomorrow**.

Modernizing Air Cargo

Modernizing air cargo and making digital the new business as usual is an imperative. **Digitalization** is a key enabler for the development of new innovative services and solutions, thus increasing the value of the air freight to shippers.

Building Sustainability

Building effective solutions today to create the right tomorrow is the foundation for the sustainability agenda established on the three pillars of **people, planet, and profit**.

4 areas of focus

In October 2016, the Cargo Committee guided IATA to focus on the following 4 areas:

Safety & Security
- Lithium Batteries
- Safety & security for airmail / e-commerce
- Smart and harmonized regulations
- Data sharing & ACID (Air Cargo Incidents Database)

Visibility & Digitization
- Paperless & e-freight / e-AWB
- Smart data sharing & Digital Cargo
- Quality & Cargo iQ

Industry Management & Business Transformation
- Monitor, engage and partner with the other industry organizations
- Confirm and deliver the industry objectives
- Leverage GACAG for industry benefit

IATA's Value Proposition
- Clarity on IATA Service portfolio
- Relevant IATA Economic Reports for industry benefit
- Fostering education portfolio

AGM Resolution on Cargo: Airlines Commit to Air Cargo Modernization

On June 2017, the 73rd Annual General Meeting (AGM) adopted a resolution to accelerate the modernization and transformation of the air cargo industry.

INTRODUCTION

NOTING that air cargo provides critical connectivity for the global economy transporting 35% of global trade by value, equating to a value of goods in excess of US$ 5.5 trillion and generates annual revenues for IATA members in excess of US$ 50 billion.

ACKNOWLEDGING that safe and secure air cargo operations remain the industry's primary objective and that efficient and optimized ground services support enhanced customer service and effective safety and security compliance.

RECOGNIZING that shifts in consumer behavior and the increased demand for on-time and temperature sensitive commodities require a high quality, predictable and transparent supply chain.

RECOGNIZING that the World Trade Organization (WTO) Trade Facilitation Agreement (TFA) is an instrument that promotes enhanced international trade through simplification of border management complexities whilst promoting the enhanced use of technology by customs administrations including the provision of advanced air cargo information to facilitate effective supply-chain security compliance.

RECOGNIZING that efficient modernized air cargo services are necessary to continue to contribute to industry profitability and sustainability and that enhanced standards will enable member airlines, their customers and supply-chain partners to benefit from efficient data management solutions derived from data-on-demand mechanisms.
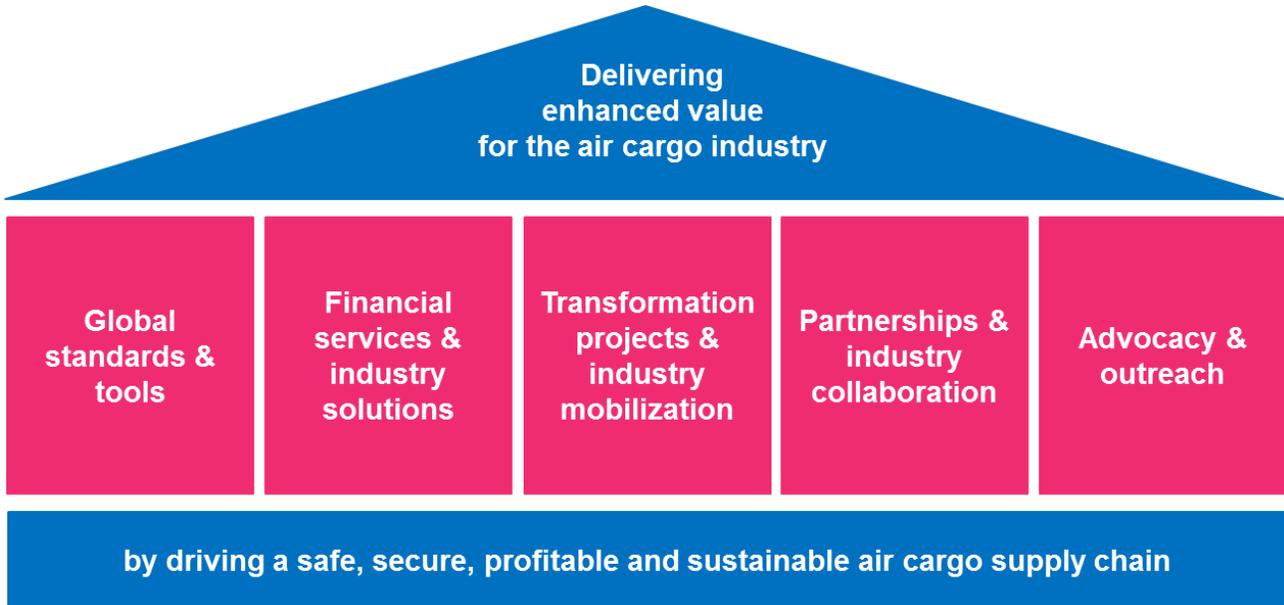
RESOLUTION

The IATA 73rd Annual General Meeting:

1) AFFIRMS its support for smart regulation designed to enhance air cargo supply chain safety and security, and urges governments and other regulators to engage in early dialogue with industry to ensure effective and workable measures are developed and implemented;

2) CALLS on governments to implement, at the earliest opportunity, the provisions of the WTO TFA to facilitate a reduction in border transactional costs;

3) COMMITS to supporting the adoption of modern and harmonized standards addressing the evolving demands of shippers, while ensuring safe and secure operations, particularly in relation to the shipping of special and vulnerable cargo as well as dangerous goods;

4) STRONGLY URGES airlines, freight forwarders, ground handlers and shippers to embrace the use of enhanced technology to provide data-on-demand, real time tracking, and transparent information services to the ultimate user of air cargo transportation;

5) AFFIRMS that the removal of paper based transportation documents must be concluded urgently in order to digitalize transportation information and that IATA members commit to the implementation of effective quality management solutions designed to enhance the shipping experience; and

6) RECOMMENDS support of cargo industry transformation through the Simplifying the Business of Air Cargo program which includes embracing the Smart Facilities initiative designed to enhance ground handling service quality through self-assessment and independent verification audit programs, aligned with the enhanced ISAGO program

how?

Delivering the agenda

IATA Cargo services portfolio

IATA develops global standards and tools, offers financial services and industry solutions, drives transformation projects, creates partnerships, and runs campaigns, advocacy and outreach activities.

Delivering enhanced value for the air cargo industry

Global standards & tools	Financial services & industry solutions	Transformation projects & industry mobilization	Partnerships & industry collaboration	Advocacy & outreach

by driving a safe, secure, profitable and sustainable air cargo supply chain

Global standards & tools

IATA's core business is to set standards for the airline industry. On the Cargo side, IATA establishes standards, rules, guidelines, recommendations and provides useful tools accompanying those standards in the areas of handling of mail and all types of cargo; security, customs, data exchange, etc.

Cargo Services Conference (CSC)

Cargo standards are developed and maintained by the CSC, a permanent and autonomous body consisting of representatives from IATA member airlines. CSC is supervised by the Cargo Procedures Conferences Management Group (CPCMG), which facilitates liaison between CSC, Cargo Agency Conference (CAC) and the Cargo Committee.

CSC is organized with 6 distinct Boards, each with relevant permanent Working Groups or temporary Task Forces and 1 Council when required:

- DGB: Dangerous Goods Board
- LAPB: Live Animals & Perishables Board
- ULDB: ULD Board
- AMB: Airmail Board
- CBMB: Cargo Border Management Board
- COTB: Cargo Operations & Technology Board
- ICHC: IATA / Cargo Handling consultative Council
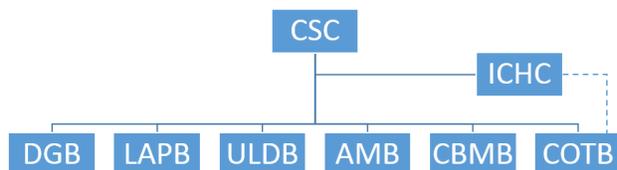
The primary objectives of the CSC include:
- Adopting and maintaining Resolutions and Recommended Practices that establish the technical standards and procedures necessary to facilitate the proper handling and facilitation of multilateral cargo interlining
- Developing common industry positions on broad cargo services issues including cargo handling, documentation, procedures, rules and regulations, ULD control, ULD technical specifications, dangerous goods regulations, live animals and perishables regulations, and automation standards
- Exchange industry information

The CSC has two types of members: voting members and non-voting members. Each active member of IATA that operates a scheduled commercial international air transport service for the carriage of cargo is a voting member of the CSC. An associate member of IATA may elect to be a non-voting member of CSC.

IATA standards are distributed to the industry through specific manuals, training programs, certification programs (when relevant), local workshops (where needed), etc.

The main cargo standards and their associated manuals are:
- DGR – Dangerous Goods Regulations
- LBSG – Lithium Battery Shipping Guidelines
- LAR – Live Animals Regulations
- PCR – Perishable Cargo Regulations
- TCR – Temperature Controlled Regulations
- ULDR – Unit Load Devices Regulations
- CSCRM – CSC Resolutions Manual
- ICHM – IATA Cargo Handling Manual
- Cargo-XML Messaging Manual & Toolkit

> Full list of Cargo standards publications on IATA website

Financial services & industry solutions

Commercial aviation is a highly integrated, global network of thousands of companies and organizations. That network depends on reliable, efficient, and secure systems to report, collect, and remit funds between the different parts of the value chain. IATA Settlement Systems are the backbone of the global air transport system.

Cargo Account Settlement System (CASS)

Governed by the CAC, CASS enables the swift, reliable, and cost-efficient movement of funds among airlines and their cargo partners. It provides agents with industry recognition of their financial and professional competence while airlines gain access to a worldwide distribution network of accredited cargo agents to sell their product. CASS operates through CASSLink, an advanced, global, web-enabled e-billing solution.

Industry solutions

Focusing on its relevance to its member airlines and the air cargo supply chain, IATA is looking at developing innovative industry solutions that support the industry to perform better. IATA's portfolio includes publications, training, consulting services, business intelligence products, certification programs.

More information in the Cargo Solutions Flipbook on IATA website

Transformation projects & industry mobilization

StB Cargo: strengthen today, build tomorrow

During 2016, IATA officially launched the Simplifying the Business of Air Cargo program, StB Cargo modelled on the successful Passenger program establish for some years. The new program will become the umbrella for transformational initiatives in air cargo.

Projects under StB Cargo include technology-driven initiatives that address the necessity of embracing digitalization and providing customers with greater visibility:
- e-freight & e-AWB
- Digital Cargo
- Interactive Cargo
- Smart Facility
- ACID – Air Cargo Incidents Database

Industry Mobilization

Our success will be dependent on the mobilization of all industry stakeholders – including airlines, freight forwarders, airports, governments and ground handlers – towards a common goal of making air cargo easier, smarter and faster. Using its regional and local representatives, IATA is committed to involving the entire supply chain to ensure that a set of common industry business and transformation objectives are developed. This will ensure the relevance of StB Cargo and secure the achievement of future goals.

Cargo Innovation

Our industry needs to embrace speed and innovation to meet the challenges and address customers' expectations. This is why StB Cargo aims to foster longer-term innovation for the benefit of the IATA member airlines and the air cargo industry as a whole.
Topics on IATA's innovation radar include blockchain and smart contracts, internet of things applied to air cargo, automation in the warehouse, unmanned vehicles / drones for tomorrow's air cargo, etc.

Partnerships & industry collaboration

The industry recognizes that transformation and industry success and sustainability can only be achieved through collaborative efforts. Therefore it is focused on developing partnerships to strengthen air cargo.

Industry Collaboration

Close collaboration with ICAO and UPU, international organizations such as the CITES, WCO and WTO, global, regional and local regulators, and industry associations and individual stakeholders in the areas of safety, security, trade facilitation, environment, operations, airmail, etc.

GACAG – Global Air Cargo Advisory Group

Formed in 2010, GACAG is comprised of the International Federation of Freight Forwarders Associations (FIATA); The International Air Cargo Association (TIACA); the Global Shippers Forum (GSF); and IATA.

GACAG provides the air cargo industry with a strong, unified voice in its dealings with worldwide regulatory authorities and other bodies whose decisions directly impact on air cargo helping to make the industry more efficient, competitive, sustainable and profitable.

The five areas of focus for GACAG are:
- Safe transport of lithium batteries
- Effective border security and advance cargo information
- Efficient border management and trade facilitation
- Accelerating industry modernization
- Minimizing environmental impacts

IATA / FIATA Air Cargo Program (IFACP)

After four years of development, the IFACP is undergoing final preparations for a pilot launch during Q2 2017. The program reflects the business relationship that now exists between freight forwarders and airlines rather than the historic agency-based relationship that existed previously. Jointly managed by airlines and freight forwarders the IFACP should enhance the implementation of industry programs such as e-AWB and e-freight.

Strategic Partnership Program (SPP)

The SPP is a platform for aviation solution providers to build as well as strengthen relationships with key industry stakeholders. Through their participation in various IATA work groups, Strategic Partners gain a unique insight into airlines' priorities and have the opportunity to be recognized for working together with IATA in serving the air transport industry.

On the Cargo side, there are currently 5 areas of involvement:
- Cargo Operations and Technology (formerly known as e-cargo)
- Cargo Electronic Messaging
- Piece Level Tracking
- Cargo Standards
- Unit Load Devices

A new area of involvement for unmanned aerial vehicles (UAVs) / Drones is currently under development for launch during 2017.

Advocacy & outreach

One of IATA's key mission is to represent its member airlines and be their voice with other industry partners, with regulators, general public, etc. We do that through our communication channels, from press to social media, and through the IATA Cargo events we organize for the benefits of the industry.

IATA is also committed to raising the profile of air cargo through the development of outreach materials and action plans targeting governments, airports, customers, students and future employees and airlines' CEOs. IATA Cargo's advocacy and outreach activities focus on:

Safety campaigns
- LB workshops in Asia
- DG in airmail campaign with UPU
- IATA outreach to Governments and e-commerce companies regarding DG / LB
- ULD Safety Awareness campaign
- Illicit Wildlife Trafficking

Value of Air Cargo
- Value of air cargo study
- "Air Cargo Makes It Happen" campaign
- Benefits of adoption of TFAs
- Global shipper surveys
- FACE program
- Air cargo carbon footprint

IATA Events

Organized every year in March, the **World Cargo Symposium (WCS)** has evolved to become a major industry decision-making platform. This event also serves to raise the profile of air cargo with governments as a strategic partner, helping to ensure cargo has the regulatory environment and infrastructure needed to successfully enable growth.

Other events are organized by IATA to raise awareness, educate stakeholders and foster collaboration on specific areas:
- e-Cargo Conference
- Cargo Security & Facilitation Forum
- Lithium Battery Workshop
- AirPharma Conference
- DronesLAB
- Cargo Claims & Loss Prevention Conference
- CNS Partnership Conference
- CNS Cargo Industry Affairs

IATA Cargo delivery team

A guiding concept of IATA's structure is "*global development, regional delivery*", where the head office divisions drive the development of global standards, systems and advocacy positions, while the regional and country offices are responsible for implementation.

To deliver its cargo agenda, IATA relies on:
- A dedicated Cargo team of 25 people structured around six functional areas;
- An interest group, Cargo iQ;
- Cargo regional and local managers in five regions and a dedicated cargo structure in the US, Cargo Network Services (CNS), which handles every aspect of the agenda with a specific USA market focus and is governed by a dedicated CNS Board;
- Business partners in the Financial and Distribution Services division (handling CASS, Cargo Agency Program and the IFACP);
- Business partners and commercial experts managing the extensive cargo products portfolio (publications, training, business intelligence solutions, consulting);
- Business partners and commercial experts organizing the cargo events;
- Business partner expertise in advocacy to develop, conduct and support lobbying and outreach activities related to air cargo;
- Business partner expertise in economics to monitor and forecast the air cargo outlook; and
- Business partner expertise in legal to take a global view of the ever changing legal environment in which we operate.
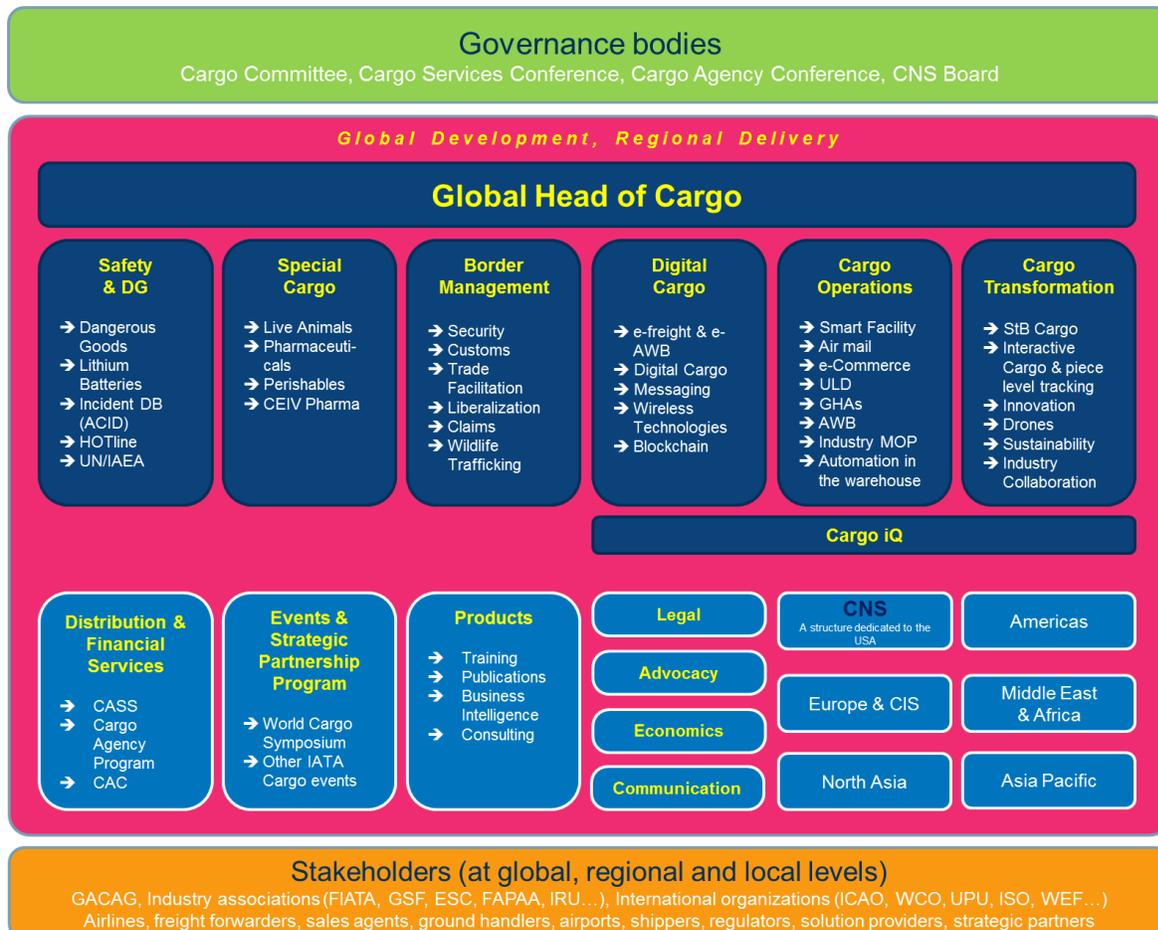
Cargo Safety

Dangerous Goods (DG), including Lithium Batteries (LB)

Substances and articles that meet the classification criteria as DG may, if not shipped in accordance with the applicable regulations, endanger the safety of an aircraft, its passengers and/or crew. The air transport of these DG can either be restricted to carriage on cargo aircraft only, or permitted on passenger aircraft, subject to compliance with the regulatory requirements.

Safety depends on partnerships, information sharing, and global standards. IATA works closely with national governments, ICAO, aircraft manufacturers, and experts from industry to identify and implement changes to the regulations to enhance safety. IATA also works with airlines and other industry partners to identify mitigation measures, and produces effective and efficient guidance, standards and safety audits to reduce risks.

On information sharing, IATA is developing an *ACID (Air Cargo Incident Database)*, as part of StB Cargo program. This database of de-identified airline incident reports will offer a secure environment for airlines and ground handlers to pool their safety and operations information, supporting a proactive data-driven approach for advanced trend analysis, predictive risk mitigation and improvement programs.

Airmail Safety

DG in airmail pose a significant threat for the safety of passengers, aircrafts, crew and other cargo. Airlines need to understand and implement training and awareness regarding the risks generated by such items, especially when looking at the rising volumes of e-commerce items shipped through the postal organizations. On that side, IATA and UPU developed the *Alarm Resolutions* concept and amended the Airport Handling Manual (AHM) to reflect the latest requirements regarding DG/LB and wrongly admitted items in airmail.

ULD Safety

On the *safety* side, IATA promotes global standards for the design and use of ULDs (fire resistant container) and accessories (fire containment cover), which can significantly contribute to cargo compartment fire protection.

Special Cargo

Other special cargo such as *live animals, perishables and pharmaceuticals*, require transportation in compliance with regulations, standards and training. The standards that have built a global industry are applicable to criteria such as the acceptance, handling, loading, transport and documentation.

IATA takes a supply chain approach (including airlines, ground handlers, freight forwarders, shippers and industry experts) in its standards setting activities and works also closely with national governments and international organizations (such as the WHO,

CITES and OIE) with an aim to establish appropriate regulations that harmonize handling and transport procedures as well as promote best practices.

IATA ensures that both safety and animal welfare are addressed in all regulatory issues pertaining to transportation of live animals by air, and that the integrity of the pharmaceutical and perishables product are maintained throughout the journey.

Since 2014, IATA also developed the Center of Excellence for Independent Validators in Pharmaceutical Logistics (**CEIV-Pharma**) aiming to ensure the transport and handling of pharmaceutical products is in accordance with regulatory and industry requirements.

In 2017, the ACID will also be explored to enable the reporting of 1/ any potential discrepancies with the container requirements and improve the regulations; 2/ any occurrences happening when handling and/or transporting live animals by air to help the industry identify trends, specific regions or issues and then develop actions to reduce their numbers; and 3/ trial CEIV certification program in the area of handling and transport of live animals.

Cargo Border Management

Cargo Security

Since the Yemen printer cartridge plot in 2010, the security of the air cargo supply chain has been under increased scrutiny. Governments have increased their oversight and often require enhanced advance information about cargo transported, and/or have introduced 100% screening requirements for cargo shipments.

The United Nations Security Council Resolution 2309(2016) on civil aviation security calls on States and organizations to apply risk-based measures that are assessed regularly to reflect the evolving threat picture. States and organizations are requested to assist each-other in delivery of capacity building, strengthen **security screening** procedures and promote innovation in technologies and techniques to maximize the capability to detect security threats.

To support regulators and strengthen supply chain security, IATA and the industry are working on 1/ global standards such as the transmission of electronic messages to convey cargo-related data (Cargo-XML); 2/ the harmonization of regulatory requirements for **Advance Cargo Information (ACI)** and the **electronic Consignment Security Declaration (e-CSD)**; and 3/ innovation for screening technologies.

IATA also develops programs and tools to support airlines and their partners to understand, implement and comply with cargo security regulations. It includes 1/ **CEIV-Security** to improve air cargo security in compliance with regulation, particularly the EU ACC3 regulations, without disrupting the flow of cargo; and 2/ **secure supply chain capacity building program** to support regulators and air cargo industry stakeholders when designing and implementing effective security programs and processes in compliance with international requirements.

Customs & Trade Facilitation

IATA works to promote *trade facilitation*, in the context of international agreements and existing standards, with the aim to streamline border procedures, make the transport of air cargo faster and more predictable and contribute to increasing the global trade of goods, without jeopardizing the security of the supply chain.

IATA works with the industry, WCO and national Customs authorities to encourage 1/ governments to ratify necessary legislative priorities to enhance the movement of trade such as MC99, the revised Kyoto Convention and the WTO Trade Facilitation Agreement; 2/ the adoption of the WCO SAFE framework, and e-customs programs.

As a partner of the initiative United for Wildlife, IATA collaborates with governments and international organizations in order to assess gaps and vulnerabilities in airports allowing for the *illegal trade of wildlife* and its products.

IATA also assists airlines in their management of *cargo claims* in order to secure the integrity and obligation of all parties within the supply chain, not on a case specific basis, but in terms of policy and procedures.

Cargo Operations

Cargo Operations

Cargo operations are performed at thousands of airports all over the world by hundreds of handlers, big and small. This poses a high potential risk for deviations in quality and consistency of handling.

IATA actively drives the development of ground handling operations standards, best-practice processes and procedures, and promotes global consistency and harmonization. IATA works with the industry to modernize cargo ground operations.

The *IATA Cargo Handling Manual (ICHM)* addresses the complexity of cargo operations. Describing industry best-practices, aligned to the *Industry Master Operating Plan (MOP)* and international regulations and standards, the ICHM is the first complete set of standards covering the operational activities of all stakeholders in the cargo handling supply chain. In addition, IATA maintains the Industry MOP together with Cargo iQ, an end to end description of the air cargo industry business processes.

As part of StB Cargo, the *Smart Facility* project focuses on developing an audit and certification scheme in cargo handling, for ground handlers, airlines and other cargo facility operators. They will be encouraged to improve the quality of their services through the adoption of known best practices.

Airmail & e-Commerce

To support cargo & airmail critical business and capitalize on e-commerce growth, IATA is working with postal authorities and operators, especially with UPU and IPC, to simplify, modernize and harmonize standards, procedures and regulations concerning the handling of mail.

After the "Yemen incidents" in 2010, where explosives declared as ink cartridges were placed into airmail to the US, the European Commission (Customs and National Security Agencies) requested that security data elements for airmail consignments be transmitted to the appropriate authority for threat assessment. IATA is therefore working on **e-CSD and ACI for airmail** to address regulators' requirements.

Postal operators and carriers do not use the same systems and electronic messages. Now that regulators need to receive data elements electronically, it is essential for postal systems to communicate with cargo systems. IATA and UPU are therefore working on the **technical alignement of cargo & mail systems**.

Lastly on the operations side, UPU and IATA collaborate and maintain a relevant and modern framework document to ensure standard services are offered and applied globally.

Unit Load Devices (ULDs)

Every year, the total cost of both repair and loss of aircraft ULDs is estimated to be about USD330 million, excluding flight delays and cancelations due to their unavailability, and aircraft damages caused by improper ULD handling. With the increasing number of wide-bodied aircraft now in operation, **ULD management** is a key element of high efficiency in air transport. Making sure the right ULD is available in the right place at the right time in the right condition is critical for airline operations and revenue management.

IATA develops and maintains standards and procedures concerning the specifications, handling, restraint and maintenance of ULDs. IATA also helps its members to comply with ULD Regulations (ULDR) in place.

IATA is also looking at the **ACID concept for ULD** to integrate ULD incidents and include ULD performance monitoring into the existing Ground Damage Data Base (GDDB), part of the Global Aviation Data Management (GADM), analyzing in order to effectively reduce aircraft damage caused by ULD operations.

e-freight & Digital Cargo

Transporting cargo by air is information intensive. Large quantities of information are exchanged between many actors of a complex supply chain. The industry still relies largely on paper to transport that information and where electronic processes are already in place, they suffer from many limitations, including poor data quality, incomplete coverage, lack of common data standards, use of legacy technology and standards. IATA's vision is to achieve a fully digitally connected and integrated air cargo supply chain built on innovative technology, high quality and available data, streamlined processes, and global standards.

To achieve it, IATA works with the Cargo Operations & Technology Board (COTB) and its sub-groups to modernize air cargo standards, drive change with industry projects and explore new technologies to assess their potential impacts on and use within the air cargo supply chain.

One of the core activity of IATA is to develop and maintain cargo messaging standards. With the sun-setting of Cargo-IMP, IATA is now encouraging and supporting the industry to migrate to **Cargo-XML**.

Started in 2006 and now part of StB Cargo program, *e-freight & e-AWB* project consists of the development and implementation of end-to-end paperless transportation processes for air cargo. There are many areas of focus: from engaging regulators and governments worldwide with improved customs and regulatory frameworks, to modern electronic messaging, as well as focusing on having high quality data, beneficial to all those within the process of air cargo. To drive adoption of e-AWB, IATA provides a series of supporting tools such as eAWBLink, eAWB360 and Message Improvement Program (MIP).

Digital Cargo, another StB Cargo project, goes beyond e-freight and will be centered on the concept of getting rid of documents and peer-to-peer messaging in air cargo, to replace them with smart data. The initial purpose of this work will be to identify what would be required to ensure single data entry methodology (single input / multiple output) and the creation of one single master Digital Shipment Record (DSR).

The digital transformation of air cargo includes also the use and adoption of wireless *technologies* (sensors & data loggers), cyber security, blockchain, internet of things, big data, etc. Therefore IATA is also working with the industry and its strategic partners to explore these new technologies, develop appropriate guidelines and standards when required.

Cargo Transformation

StB Cargo

IATA has launched an industry Simplifying the Business (StB) Cargo Transformation program in 2016. This new program will become the umbrella for transformational initiatives in air cargo.

The 5 projects under StB Cargo are:
- e-freight & e-AWB, led by the Digital Cargo team
- Digital Cargo, led by the Digital Cargo team
- Interactive Cargo
- Smart Facility, led by the Cargo Operations team
- ACID – Air Cargo Incident Database

StB Cargo also focuses on fostering long-term *innovation* within the air cargo industry. It includes the exploration of new areas, development of new partnerships, and organization of innovation events.

As part of the innovation stream, IATA is working closely with the industry and regulators on the new issues of *drones / unmanned aerial vehicles (UAVs)*.

Industry Engagement

Our success dependents on regular engagement and mobilization of all industry stakeholders – including airlines, freight forwarders, airports, governments and ground handlers – towards a common goal of making air cargo easier, smarter and faster.

Sustainability

On the environment side, IATA has developed an industry standard to measure the air cargo carbon footprint (ACCF) and collaborates with other modes of transport for global harmonization.

Cargo iQ

Cargo iQ is an IATA interest group of around 80 members with the mission of creating and implementing quality standards for the worldwide air cargo industry. Cargo iQ members are airlines, freight forwarders, ground-handling agents, trucking companies and IT solution providers globally.

Cargo iQ developed a system of shipment planning and performance monitoring for air cargo based on common business processes and milestones. As part of that system, Cargo iQ's MOP maps the process in the planning and movement of air cargo consignments from shipper to final consignee. It is a unique route map for each shipment.

Today, Cargo iQ members measure their "delivery as promised" performance according to a standard methodology for more than 800,000 shipments Airport-to-Airport monthly.

Glossary & sources

Glossary

Organizations
- CITES – Convention on International Trade in Endangered Species of Wild Fauna and Flora
- CNS – Cargo Network Services
- FIATA – International Federation of Freight Forwarders Associations
- GACAG – Global Air Cargo Advisory Group
- GSF – Global Shippers Forum
- ICAO – International Civil Aviation Organization
- IPC – International Post Corporation
- OIE – World Organization for Animal Health
- TIACA – The International Air Cargo Association
- UPU – Universal Postal Union
- WCO – World Customs Organization
- WHO – World Health Organization
- WTO – World Trade Organization

Groups
- AMB – Airmail Board
- CAC – Cargo Agency Conference
- CBMB – Cargo Border Management Board
- COTB – Cargo Operations & Technology Board
- CPCMG – Cargo Procedures Conferences Management Group
- CSC – Cargo Services Conference
- DGB – Dangerous Goods Board
- ICHC – IATA / Cargo Handling consultative Council
- IFGB – IATA-FIATA Governance Board
- LAPB – Live Animals & Perishables Board
- ULDB – ULD Board

Other acronyms
- ACAS – Air Cargo Advance Screening
- ACC3 – Air Cargo or Mail Carrier operating into the Union from a Third Country Airport
- ACCF – Air Cargo Carbon Footprint
- ACI – Advance Cargo Information
- ACID – Air Cargo Incident Database
- AFTKs – Available Freight Tonne Kilometers
- AWB – Air Waybill
- CASS – Cargo Accounts Settlement System
- CEIV – Center of Excellence for Independent Validators
- CSD – Consignment Security Declaration
- DG – Dangerous Goods
- FACE – Future Air Cargo Executives
- FTKs – Freight Tonne Kilometers

- GHA – Ground Handling Agent
- GSSA – General Sales & Service Agent
- IFACP – IATA / FIATA Air Cargo Program
- ISAGO – IATA Safety Audit for Ground Operations
- ITA – Information Technology Agreement
- LB – Lithium Battery
- MC99 – ICAO Montreal Convention 1999
- MOP – Master Operating Plan
- MP4 – the Montreal Protocol 4 to the Warsaw Convention
- PACT – Pre-Load Air Cargo Targeting
- PLACI – Pre-Loading Advance Cargo Information
- PRECISE – PRE-loading Consignment Information for Secure Entry
- SDRs - Special Drawing Rights
- SWOT analysis – Strengths, Weaknesses, Opportunities & Threats
- TFA – Trade Facilitation Agreement
- UAV – Unmanned Aerial Vehicle
- ULD – Unit Load Device
- WCS – World Cargo Symposium
- XML – Extensible Markup Language

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#cargomatters

IATA Cargo

Supporting the industry in delivering
a safe, secure, profitable and sustainable air
cargo supply chain