



WORKING PAPER

ASSEMBLY — 41ST SESSION

EXECUTIVE COMMITTEE

Agenda Item 13: Facilitation Programmes

PROPOSAL TO ESTABLISH AIR CARGO MULTIDISCIPLINARY DIGITALIZATION TASK FORCE

(Presented by India, Aruba (Kingdom of the Netherlands), Ethiopia, Kazakhstan and Arab Civil Aviation Organization (ACAO), and co-sponsored by The World Bank Group (WBG) and Interstate Aviation Committee (IAC))

EXECUTIVE SUMMARY

This working paper provides an overview of the global supply chain and logistics network with emphasis on the COVID-19 pandemic, which necessitated a series of actions to address multiple challenges to the operational, safety, security and economic sustainability of air cargo transportation. The paper emphasizes the need to develop digital solutions and processes for seamless and cost-efficient air cargo transportation and thus recommends formation of an “International Civil Aviation Organization (ICAO) Air Cargo Multidisciplinary Digitalization Task Force”.

Action: The Assembly is invited to:

- a) take note of the contents of this paper;
- b) urge ICAO to form the ICAO Air Cargo Multidisciplinary Digitalization Task Force to develop an ICAO strategy covering the key aspects of economic development, safety, security and sustainability relevant to air cargo; and
- c) use the current Public Key Directory (PKD) programme as a model, direct ICAO — through the Air Cargo Multidisciplinary Digitalization Task Force — to act on recommendations from stakeholders and develop a similar pilot program for air cargo using the latest innovations in digital information exchange.

<i>Strategic Objectives:</i>	This working paper relates to Strategic Objective <i>Security & Facilitation</i>
<i>Financial implications:</i>	
<i>References:</i>	HLCC 2021-WP/38: <i>Digital transformation of processes within civil aviation authorities and change management towards modernization</i> HLCC 2021-WP/22: <i>Implementation of digital data sharing and contactless processes</i> HLCC 2021-WP/153: <i>ICAO to be more agile and adjust its priorities</i> C-WP/15379: <i>Draft assembly working paper – Cybersecurity</i>

1. INTRODUCTION

1.1 The air cargo industry, since its inception, has been a key component of the global supply chain and logistics network. Its importance grew manifold recently, where it played and continues to play a stellar role during the COVID-19 pandemic, saving millions of lives through quick and reliable transport by air of the vaccines and other essential goods.

1.2 Air cargo's significance as a key enabler of sustaining human lives/livelihoods, transition to e-commerce and enabling economic development is made possible by ensuring its safe and secure transportation, through effective legislation, implementation and monitoring.

2. REGULATORY PAPERWORK

2.1 Speed is of essence in air cargo as the customer expects the goods to be picked up from their premises as late as possible and delivered to the consignee as quickly as possible. However, over time the industry has become marred by significant amounts of avoidable paperwork that became integral to core supply chain processes.

3. CRITICAL ROLE OF TECHNOLOGY — DIGITALIZATION

3.1 The ICAO Council Aviation Recovery Task Force (CART), particularly through its Global Implementation Roadmap (GIR), encourages aviation stakeholders to digitalize as many processes as possible to allow contactless operations, which allow social distancing while improving efficiency in critical areas. The importance of the digitalization of the broader aviation eco-system has been recognized by States during the ICAO High-level Conference on COVID-19.¹

3.2 Technology can play a pivotal role in making air cargo much more efficient, secure, safe and sustainable. It acts as the common thread across the spectrum of air cargo. There are examples of excellence in air cargo digitalization efforts amongst the member States. Some examples of States undertaking digitalization initiatives include:

- a) India — As a signatory to the World Trade Organization Trade Facilitation Agreement, which calls on parties to digitalize transport and trade to the greatest extent possible, India is among many States with digital transport and trade intertwined as a common goal. India's digitalization initiatives have significantly enhanced the physical capacity of airports' cargo terminals resulting in faster cargo movement, reducing dwell times and increasing resource productivity while continuously improving cargo safety and security.
- b) Aruba — Aruba, as a small island in the Caribbean with a less complex cargo supply chain, is undertaking efforts to digitalize its air cargo ecosystem, which includes development of requisite legal as well as economic regulatory framework.

3.3 Although States are developing various digitalization initiatives, there is a need to develop common digitization solutions to meet international goals.

¹ HLCC 2021-WP/381 SAF/25

4. FUTURE STEPS

4.1 During the COVID-19 pandemic, ICAO has collaborated with other United Nations (UN) agencies including the UN Economic Commission for Europe, the Economic and Social Commission for Asia and the Pacific, and the UN Commission on International Trade Law, which already have robust work programmes for digital transport. A similar work programme for digital air cargo transportation could be developed utilizing the example of these existing work programmes of these agencies and appropriate ICAO provisions.

5. CONCLUSION — PROPOSED ACTION PLAN

5.1 Over the course of the pandemic, ICAO's flexible use of existing staff resources, collaboration with States, other UN agencies and industry to develop provisions to facilitate digital transport has been effective and should be a matter of priority in the coming triennium. The following recommendations are proposed for consideration by The Assembly:

- a) Air Cargo Multidisciplinary Digitalization Task Force is required to develop an ICAO strategy and steer the Organization's activities covering the key aspects of economic development, safety, security and sustainability related to air cargo while acting as a specialized single resource on air cargo digitalization globally.
- b) Using the current PKD programme as a model, direct ICAO — through the Air Cargo Multidisciplinary Digitalization Task Force — to act on recommendations from stakeholders and develop a similar pilot programme for air cargo using the latest innovations in digital information exchange that will:
 - 1) provide a digital air cargo operating environment using the latest standards and architectures, in alignment with the Doc 9740, *Convention for the Unification of Certain Rules for International Carriage by Air*, done at Montreal on 28 May 1999 (Article 4, paragraph 2.);
 - 2) use the current trend of digital transport to facilitate conformance to ICAO provisions;
 - 3) through generating value for Members States and supply chain stakeholders, potentially assist in financially sustaining ICAO's work in the safe, secure, sustainable economic development through air cargo services globally; and
 - 4) provide ICAO valuable experience in implementing digital identity infrastructure for potential use in other areas within its mandate.

APPENDIX

State of the Air Cargo Sector

The industry has been playing a key role by transporting goods 35 per cent in value of the goods moving internationally. The industry's ecosystem continues to create millions of jobs worldwide aiding the growth of the global economy and has supported the growth of e-commerce including cross border e-commerce.

In absolute, as well as relative numbers, the impact of air cargo on economies is significant and eclipses passenger travel:

	2019	2020	2021E
Trade Carried by Air	6,489	5,964	7,467
Tourism Spend by Air	850	310	354

Source: International Air Transport Association (IATA)² (measured in USD billions annually)

The challenge of air cargo is typically on the ground — not in the air. This is reflected by the fact that air cargo stays on ground waiting for paperwork for 85 per cent of the average transportation time and it is moving only for 15 per cent of the transportation time. It is estimated by IATA that an air cargo shipment is accompanied by up to 30 types of documents (invoice, packing list, letter of instruction, master air waybill, house air waybill, manifest, customs declarations, etc.) and depending upon the origin and destination points, more than 100 copies of paper is generated per air cargo shipment. Most of the data across these 100+ copies of papers are identical. Hence, there is a great optimization possibility in reducing the paperwork, which will make air cargo not only more environmentally sustainable but efficient as well.

How States are Responding

Indian Customs authorities have taken a lead in this area by creating a measurement mechanism of dwell time for airports, ICDs and a few other relevant entities covering all modes of transport, including air mode.³ This is one of the several key steps taken by Indian Government to establish India as a key player in air cargo in the global arena within a short time and to bring down the logistics cost considerably by bringing in regulatory, procedural and process efficiencies.

India has taken a leadership role by rolling out the air cargo single window system (also known as air cargo community system), the United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT) Recommendation 33, across most of its major airports. The state, through its air cargo policy, recommended to stakeholders (particularly the private/PPP airports) anchored these initiatives, along with the air cargo community, to create such platforms that eliminate unnecessary paperwork, provide the requisite safety and security environments, reduce congestion, generate greater economic

² *Economic Performance of the Airline Industry*, 4 October 2021. International Air Transport Association (IATA) <https://www.iata.org/en/iata-repository/publications/economic-reports/airline-industry-economic-performance---october-2021--report/>

³ https://www.cbic.gov.in/htdocs-cbec/dwell_time

efficiency through visibility in air cargo operations and make the industry more environmentally sustainable.

Proposed Next Steps

The charter of the proposed task force shall include, but not be limited to:

- a) providing a strategic plan/road map specific to the needs of air cargo sector, as a trade facilitator (ICAO economic provisions and Annex 9 — *Facilitation*);
- b) exploring innovative digital concepts (e.g., PKD, digital identity⁴) in the air cargo operating environment that can ease adherence of States and industry to ICAO provisions and providing those States more resilient supply chain connectivity⁵;
- c) providing a neutral forum for discussing issues, proposals and solutions pertaining to the air cargo;
- d) providing guidelines for implementation of technology through collaboration with appropriate other UN agencies/global bodies;
- e) harmonizing cargo-related data requirements of multiple regulators vis-à-vis customs, security and other agencies globally, including multimodal interfaces, such as through using the UN/CEFACT Multimodal Transport Reference Data Model⁶;
- f) formulating implementable measures to align with UN Sustainable Development Goals;
- g) countering counterfeit and illicit trade through collaboration with appropriate stakeholders;
- h) monitoring constantly global air cargo-related developments to ensure formulation of timely measures and implementation plans through reprioritization wherever appropriate⁷; and
- i) monitoring effective implementation and creating regulatory environment to implement goal of ‘global ease of doing business’ as a means of economic development.

— END —

⁴ <https://www.w3.org/2022/07/pressrelease-did-rec.html.en>

⁵ HLCC 2021-WP/152 SAF/116

⁶ <https://www.gtreview.com/news/fintech/icao-releases-digital-document-specifications-for-air-cargo/>

⁷ HLCC 2021-WP/153 SAF/117