The first shipment of 600,000 vaccines arranged through the UN COVAX facility arrives via air cargo services in Accra, Ghana, on 24 February 2021, beginning the largest vaccine procurement and supply operation ever undertaken.
EXECUTIVE SUMMARY

KEY CONSIDERATIONS

• Air cargo supply chains are critical to immediate population needs and pandemic response efforts worldwide, and to surging e-commerce and the successful and speedy revival of national and regional economies, post-pandemic.

• The successful global distribution of billions of time-sensitive COVID-19 vaccines strongly relies on the speed and dependability of air connectivity.

• Regulatory adaptations such as extended traffic rights and multilateral legal instruments, supported by strengthened regional and sectoral cooperation, will help to achieve greater vaccine transport efficiency and support global economic recovery.

• The promotion of contact-free digital tools and processes will accelerate the establishment of Public Health Corridors (PHCs) and related pandemic recovery initiatives, rapidly and positively transforming air cargo safety, security, and facilitation.

MAIN RECOMMENDATIONS

• **Facilitate** safe and secure and more efficient air cargo movement through the accelerated adoption of digital and emerging technologies

• Consider **economic regulatory measures** where needed for air operators in order to sustain or augment current air cargo capacity and supply chains.

• **Utilize harmonized electronic documents and data exchange** to increase the digitalization and efficiency of multimodal transport, and **establish multilateral legal instruments** to maximize air cargo’s role in national and global recoveries.

• **Strengthen information sharing and internal coordination** among both national and regional public health and air transport authorities, in addition to industry groups.

• **Ensure highest national awareness** of all related statements and coordination on behalf of ICAO and other UN system agencies and industry bodies, in addition to ICAO State Letters and guidelines issued (see Appendixes 1/2).
CRITICAL ROLE OF AIR CARGO IN GLOBAL ECONOMIC GROWTH AND PANDEMIC RESPONSE AND RECOVERY

Accounting for approximately 35% of global trade by value, the global aviation sector brings air connectivity to countries at all levels of development, plays a critical role in humanitarian missions, and remains vitally important to global economic recovery given that e-commerce is expected to constitute 96%\(^1\) of international mail shipments by 2025.

COVID-19 initially caused a 98% drop in global air travellers, and passenger aircraft ‘belly cargo’ capacity also became severely constricted due to the precipitous decline in overall flights. When the pandemic first struck, belly capacity fell by no less than 80% just as global societies were becoming more urgently reliant on the emergency aid and essential supplies that only aviation could get to them in many cases.

Prompt identification of this issue, hand-in-hand with immediate, collaborative actions on behalf of ICAO, industry, and other key stakeholders, ultimately ensured however that by the time 2020 had concluded, the number of cargo flights operated globally had actually been expanded by 2.74%, year-over-year.

This same community continues to work through ICAO to make air cargo and the broader supply chain safer for personnel and customers, less burdened by redundancies and border delays, and more secure by improving risk-based screening and information sharing.

\(^1\) Pre-pandemic projection.
AIR CARGO AND THE FAIR AND EFFICIENT GLOBAL DISTRIBUTION OF COVID-19 VACCINES

The transport of COVID-19 vaccines began in December 2020. Billions of doses are now needing to be moved all over the world, mostly by air, helping countries meet national targets and supporting the World Health Organization’s (WHO’s) Fair Allocation Framework as part of the COVAX Facility. ICAO is closely supporting and enhancing these efforts guided by its COVID-19 vaccine action plan.

The logistics involved with meeting this challenge comprise a complex set of processes involving careful timing and the use of temperature-sensitive distribution systems. Vaccines furthermore require robust tracking and monitoring throughout their journeys, and must be handled with skilled expertise and care.

The ICAO Council Aviation Recovery Task Force (CART) issued a new recommendation in its Phase III Report (March 2021) urging countries to adopt recently-finalized addenda to the ICAO Technical Instructions for the Safe Transport of Dangerous Goods by Air (Doc 9284). The new measures involve a range of key concerns and are designed to ensure that vaccines will be safely and efficiently accepted, handled and transported.

In addition, ICAO is closely collaborating with UN agencies, aviation industry groups, and other key international players to identify and alleviate bottlenecks affecting global air cargo shipments. Vaccine transport challenges relating to inter-modal cargo facilitation and the exemption of key personnel from travel restrictions are key common priorities at the moment, and joint outreach on these points to national and other government decision makers has been undertaken through numerous statements and calls (see Appendices 1 and 2).

2 International Atomic Energy Agency (IAEA); United Nations Economic Commission for Europe (UNECE); United Nations Economic Commission for Latin America and the Caribbean (UNCEPAL); United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP); United Nations Economic and Social Commission for West Asia (UNESCWA); United Nations International Children’s Emergency Fund (UNICEF); World Food Programme (WFP); World Trade Organization (WTO); Global Express Association (GEA); The International Air Cargo Association (TIACA); International Air Transport Association (IATA); International Chamber of Commerce (ICC); International Federation of Freight Forwarders Associations (FIATA); International Port Cargo Systems Association (IPCSA); World Customs Organisation (WCO)
Across the entire air transport industry, enterprises of all shapes and sizes are being forced to dramatically adapt their business models in an attempt to survive. Regulatory adaptations should also be considered to help mitigate negative impacts on air cargo, achieve greater efficiency in vaccine transport, and support global economic recovery.

The increased use of multilateral legal instruments, supported by strengthened regional and sectoral cooperation, can play an important role in addressing these challenges. As outlined in Recommendation 16 of the CART Phase III Report, exceptional measures to alleviate regulatory restrictions on air cargo operations may help in securing necessary air cargo capacity through, for example, the granting of temporary Seventh Freedom traffic rights.

ICAO’s South America Regional Office has already collaborated with the Latin American Civil Aviation Commission (LACAC) to produce a multilateral agreement on this basis to temporarily liberalize air cargo services in the region. Other countries have taken a unilateral approach by directly granting expanded traffic rights to foreign airlines.

Extended traffic rights can also enable deliver substantial trade and connectivity benefits in the longer term, including by optimizing the role of e-commerce post-pandemic.

¹ Joint Statement on the Contribution of International Trade and Supply Chains to a Sustainable Socioeconomic Recovery in COVID-19 Times (ICAO/IMO/UNCTAD/UNECE/UNESCWA/UNCEPAL/UNESCAP/UNECA)
Digitization has begun to rapidly transform many aspects of passenger and cargo safety, security, and facilitation, and ICAO has been very actively promoting air cargo digitalization concepts and benefits to supply chain stakeholders, raising important awareness among civil aviation administrations, customs authorities, and industry.

Similar topics have also been explored during an ICAO Innovation Symposium economics panel late last year, which focused on air cargo and global supply chains.

ICAO is undertaking direct collaborative action in this area with the United Nations Economic Commission for Europe (UNECE), as part of the UN Development Account *Transport and Trade Connectivity in the Age of Pandemics* project.

ICAO’s role will be to coordinate expertise and insights to support the development of new air cargo technical specifications for electronic document and data exchange, provisions which will be aligned with the *Multimodal Transport Reference Model* of UNECE subsidiary UN/CEFACT (United Nations Centre for Trade Facilitation and Electronic Business).

In addition to the economic benefits deriving from improved efficiencies and trade facilitation, ICAO’s overall collaboration with the UNECE on new contact-free digital tools and processes will accelerate the establishment of Public Health Corridors (PHCs) and related pandemic recovery initiatives.
**APPENDIX 1: COVID-19 JOINT STATEMENTS AND PUBLICATIONS**

*Statement on the Contribution of International Trade and Supply Chains to a Sustainable Socioeconomic Recovery*

**Participating UN agencies:**
ICAO/IMO/UNCTAD/UNECE/UNESCWA/UNCEPAL/UNESCAP/UNECA

**Summary:**
Calls on all governments to maximize the contribution of international trade and supply chains to a sustainable socio-economic recovery post-COVID-19 through increased use of international legal instruments and standards, as well as strengthened regional and sectoral cooperation.

Supports digitalization of trade and customs procedures, using global, United Nations standards, to ensure the fast and secure exchange of data and information concerning cargo and means of transport, and encourages said actions to be coupled with accession to, and full implementation of, the United Nations legal instruments on transport, in particular those relating to transport facilitation and paperless trade.

*Joint statement on pandemic response and recovery efforts for designated postal operators, air cargo carriers and express mail operators*

**Participating UN agencies:**
ICAO/UPU

**Summary:**
Encouraged member countries to recognize the essential nature of postal and air cargo services, ensure operator financial stability, and provide their related workers with the flexibility required to undertake their duties. Further encouraged member countries to work in tandem with their designated postal operators and air transport operators to strengthen collaboration between global supply chain stakeholders (e.g. digitalization), and to increase analysis of each other’s e-commerce and traffic big data in order to identify and report on the logistical constraints to e-commerce growth.
ICAO/IMO/ILO Joint Statement on travel restrictions for key workers supporting continued international freight movement

Participating UN agencies:
ICAO/IMO/ILO

Summary:
Encourages countries to assure that aviation personnel, air cargo supply chain personnel, and essential service provider personnel at airports and ports are designated as 'key workers', regardless of nationality, in order to exempt them from travel restrictions, ensure their access to emergency medical treatment, and, if necessary, facilitate their emergency repatriation.

Joint Statement on the global transportation and distribution of COVID-19 vaccines and associated medical supplies

Participating UN agencies:
ICAO/WCO

Summary:
Encourages countries to adhere to ICAO provisions for a safe and secure supply chain (including in Public Health Corridor (PHC) contexts), and the updated WCO HS Classification Reference, so that relevant stakeholders are in a better position to safely and efficiently support current global distribution targets.
APPENDIX 2:
ICAO STATE LETTERS (SL) AND ELECTRONIC BULLETINS (EB)
PUBLISHED SINCE THE ONSET OF COVID-19

SL 2020/47 – Implementation of contingency arrangements to reduce the risks of the spread of COVID-19
Special attention should be given to the facilitation of entry, departure and transit of aircraft engaged in relief flights as per Annex 9 — Facilitation Standard 8.8, in light of the urgent need to ensure sustainability of the global air cargo supply chain enabling notably to maintain the availability of equipment such as ventilators, masks and other health and hygiene-related goods, which are necessary to assist in reducing the public health risk of the spread of COVID-19.

SL 2020/97 – Facilitating passenger flights, including repatriation flights, using public health corridors during the COVID-19 pandemic
Ensuring rapid authorizations for flights: “States are requested to grant rapid authorizations for the entry, departure and transit of aircraft of … cargo transport flights carrying essential medical equipment and supplies.”

EB 2020/36 – Implementing a Public Health Corridor to Protect Flight Crew During the COVID-19 Pandemic (Cargo, Maintenance, Ferry, and Delivery Flight Operations)
The lack of consistent COVID-19 border measures being applied to flight crew could result in extending or worsening the disruption to supply chain during the pandemic. This document (containing CAPSCA Harmonized Guidance on Facilitating Cargo Flights and Protecting Crew during the COVID-19 Pandemic) could serve as a framework for harmonizing procedures implemented by States in order to facilitate cross border cargo operations.
This guidance applies to operations supporting the carrying of cargo, maintenance activities and positioning of aircraft without passengers specifically those involving freighter/cargo aircraft transporting cargo and operations involving passenger aircraft transporting cargo in the passenger cabin (crew other than flight crew may need to be on board such flights for safety reasons).

EB 2020/32 – Guidelines for Aviation Security Contingency Measures During the COVID-19 Pandemic
The document focuses on aviation security contingency measures during the pandemic and covers the entire aviation security ecosystem, including air cargo security specific guidance.

SL 2020/129 – Maintaining efficient air cargo operations during the COVID-19 pandemic
Supplementing the Aviation Security Manual (Doc 8973), this calls for specific actions to alleviate challenges to safe, secure, efficient air cargo and broader supply chain operations and calling for supply chain digitalization.
Recalling the 27 April letter from the UN Secretary General to Heads of State, encourages optimizing planning and operating efforts through enhanced information flows between aviation and humanitarian stakeholders. ICAO is expanding collaboration with other UN agencies and other international organizations to help facilitate the transport of vaccines using refrigerants, which could call for adherence of Annexes 6 and 18 to the Chicago Convention.
Guidance for Safe Operations Involving Aeroplane Cargo Compartments (Doc 10102)
Guidance on a Competency-based Approach to Dangerous Goods Training and Assessment (Doc 10147)

Provides guidance on specific impacts related to operations, crew, safety, security, and the environment.

Guidelines for Aviation Security Contingency Measures During the COVID-19 Pandemic

Incorporates inputs and best practices shared by industry and State experts, aiming at assisting States to ensure full implementation of Annex 17 provisions during the current crisis and beyond; harmonize contingency measures, including sanitary protocols; and help protect screeners, passengers and staff while preserving aviation security objectives as well as proposing possible and alternative aviation security measures. General guidance is applicable to staff working in the air cargo industry and the document includes a specific air cargo security chapter.

SL 2021/06 – Distribution of COVID-19 Vaccines and Air Cargo Security

Provides States guidance on actions they can take to maintain a secure supply chain for COVID-19 vaccines being transported by air, particularly underscoring the importance of continued adherence to Annex 17 and other relevant aviation security provisions, such as Known Consignor regimes, while also advising on alternative procedures.


Directs States to implement Addendum No. 1 to Doc 9284 without delay so as to facilitate the transport of COVID-19 vaccines.

Guidance on Economic and Financial Measures to Mitigate the Impact of the Coronavirus Outbreak on Aviation

This guidance summarizes a range of economic and financial measures that can be explored by States and the industry to cope with the economic fallout of the pandemic, alleviate the imminent liquidity and financial strain, and to strengthen the industry resilience to future crises. It outlines the potential implications and constraints of each measure while being complemented by concrete examples—including from air cargo services—to help decision-making of policymakers and industry leaders in accordance with their unique circumstances and needs.