

Development in support of Digitalization in the Air Cargo Industry

By: International Civil Aviation Organization (ICAO)

ASSOCIATION OF CARIBBEAN STATES (ACS)
31ST MEETING OF THE SPECIAL COMMITTEE ON TRANSPORT
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Air Cargo Digitalization in COVID-19 Times **Overview**

Prepared for: The Association of Caribbean States (ACS)

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**In contrast, surge in cargo flights
since March 2020**

In contrast to the fall in passenger traffic, cargo flights surged with the increased cargo-only operations using passenger aircraft



What is the DHL Global Connectedness Index (GCI)?



Trade Flows

- Merchandise Trade
- Services Trade



Capital Flows

- Foreign Direct Investment (FDI)
- Portfolio Equity



Information Flows

- Voice Calls
- Internet Bandwidth
- Scientific Research Collaboration
- Printed Publications Trade



People Flows

- Migration
- Tourism
- International Education

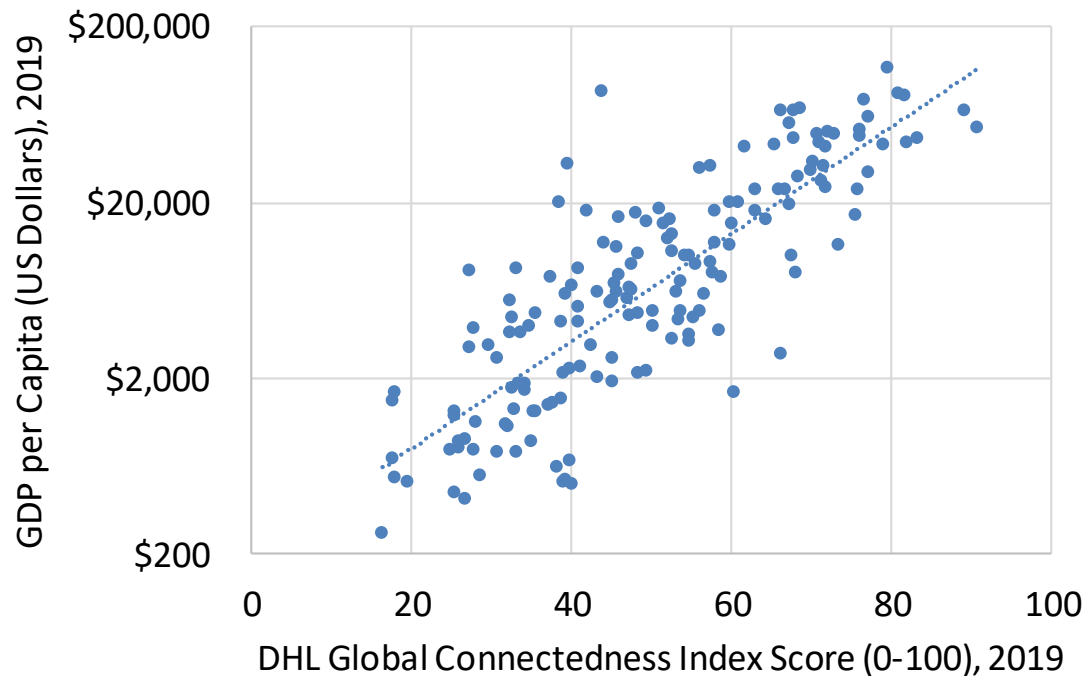
GCI 2021: Policy Themes

<ul style="list-style-type: none">• Capacity-building• Diversification• Visibility/ Digitization	Fortify Global and Regional Supply Chains	Bolster Trade Agreements and International Institutions	<ul style="list-style-type: none">• Trade agreements and resilience*• Rising protectionism• WTO appellate body
<ul style="list-style-type: none">• Vaccine equity• GVCs for LDCs**• Broader agenda (next section)	Prevent the Poorest Countries from Falling Further Behind	Secure the Future of Digital Globalization	<ul style="list-style-type: none">• Demonstrated value• Cybercrime• Regulatory uncertainty

* See Alessandro Nicita and Mesut Saygili, "Trade Agreements and Trade Resilience During COVID-19 Pandemic," UNCTAD Research Paper No. 70, October 2021.

** Lucian Cernat and Alessandro Antimiani, "Untapping the Full Development Potential of Trade Along Global Supply Chains: 'GVCs for LDCs' Proposal," *Journal of World Trade* 55.5, 2021.

Global Connectedness and Prosperity



- **Strong positive relationship** between global connectedness and prosperity
- Growing body of **evidence on causality**
- Similar relationship with broader measures of well-being such as UNDP Human Development Index



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ICAO Council Aviation Recovery Task Force (CART)

Key Principle #3 – Ensure essential connectivity

States and industry should maintain essential connectivity and global supply chains, especially to remote regions, isolated islands and other vulnerable States.

Global Implementation Roadmap – Implementation of CART Rec #7

“To address the need for broader digitalization of information exchange, efforts will be made to further facilitate larger scale aviation movements of passengers and cargo...”

Air cargo services are a key component of global supply chains, offering fast and reliable transport of high-value goods, including vaccines and medical equipment.



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ICAO Public Health Corridor (PHC) Concept

- Inclusive of cargo operations (EB 2020/36)
- For cargo, it highlights considerations on:
 - Contact with surfaces contact in the immediate environment or with objects used by the infected person (e.g., paper)
 - Physical distancing
- COVID-19 introduces the need to minimize physical contact among supply chain actors and adds new urgency to the need for digital, contactless technologies and processes



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Montreal Convention 1999

- MC99 is intended to replace the patchwork of regimes that developed since the Warsaw Convention in 1929
- Entered in to force in 2003
- It governs airline liability for passengers, baggage and cargo on international flights in cases of:
 - death, injury or delay to passengers
 - delay, loss or damage to baggage
 - delay, loss or damage to cargo
- Industry supports ICAO in promoting MC99 as **the** single, global Convention on airline liability, as well as an important driver for digitalization.



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ICAO urges States to ratify MC99

Doc 10140

Assembly Resolutions in Force
(as of 4 October 2019)

A40-9: Consolidated statement of continuing ICAO policies in the air transport field

APPENDIX A – Economic regulation of international air transport

Section I. Basic principles and long-term vision

4. *Urges* Member States that have not yet become parties to the IASTA, the **Montréal Convention of 1999**, the Cape Town Convention and its Protocol and other ICAO instruments governing international air transport to give urgent consideration to so doing;

A40-28: Consolidated statement of continuing ICAO policies in the legal field

APPENDIX C – Ratification of ICAO international instruments

Urges all Contracting States which so far have not done so to ratify the other international air law instruments, in particular the **Montréal Convention of 1999**, [...] as soon as possible.



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Key Benefits of MC99 for Air Cargo

- MC99 permits substitution of air waybills by other means preserving a record of carriage
- Electronic records (e.g., eAWB) can be best implemented in MC99 trade lanes (where both States are Parties to MC99*)
- Electronic records deliver improved shipment times, customs compliance, security and competitiveness of air freight

*or between Parties to MP4



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Enter Digitalization

- Digitalization is the use of digital technologies to change a business model and provide new revenue and value-producing opportunities.
- It will allow aviation to bring in new technologies, as well as better apply existing ones.



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Why digitalization? What are the benefits?

- Alignment with public health measures, such as the ICAO PHC concept, arising from the COVID-19 pandemic through contactless technologies
- Increased safety through awareness of dangerous goods
- Increased security through faster pre-clearance and other benefits
- Increased efficiency through reducing delays along the entire supply chain, particularly at borders and modal interfaces
- Increased resilience through advanced IT capabilities and prognostication
- Smaller environmental footprint through reduction in paper waste and increased operations



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Current air cargo digitalization exercise:

- Supports existing SARPs and other provisions, as opposed to developing new ones; and
- Can readily evolve to meet new requirements and challenges in alignment with SARPs and other provisions.

Short term: Digitalization will support current regulations.

Long term: Digitalization will encourage regulations to evolve due to the benefits it enables



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Collaboration

- **New Collaboration between ICAO, UNSCAP, UNECE and other UN Agencies announced in September 2020:**

Joint Statement on the Contribution of International Trade and Supply Chains to a Sustainable Socioeconomic Recovery in COVID-19 Times:

“Therefore, we support further 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.”

- **ICAO has also increased collaboration with leading Member States to advance implementation of digital transport.**



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In the first year, we ...

1. Built a clear case for digitalization and how ICAO can support Member States and other stakeholders;
2. Initiated formal collaboration with UN Economic Commission for Europe to develop deliverables, which are now available;
3. Began exploring partnerships with Member States to develop a new global air cargo eco-system encompassing various regulatory needs built on the latest standards; and
4. Began working with industry stakeholders to identify specific business requirements/needs and develop an inclusive plan to advance #3.

ICAO and UNECE collaborated to develop as deliverables electronic information exchange technical specifications that are key to the safety, security, and efficiency of air cargo: the Air Waybill (AWB), Dangerous Goods Declaration (DGD), and the Consignment Security Declaration (CSD). These specifications provide for interoperability with industry standards for (e-)AWB, (e-)DGD and (e-CSD) issued by IATA.

These deliverables have been welcomed, per trade press:

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



Emerging Innovations and Trends

Verifiable Credentials

- A key component of reliable, secure information exchange in digital trade, transport and finance
- Leading stakeholders, including the U.S. Department of Homeland Security (DHS), are engaged in developing standards and architectures that will bring increasing benefits—including security—to the global supply chain digitalization effort
- Open standards based on interoperability that facilitate understanding and cooperation between diverse stakeholders from different states, UN agencies, and supply chain actors are poised to augment end-user choice through a marketplace of advanced options for digital trade and transport that can connect different domains



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We invite States to:

- Consider supporting the A41 Working Paper 182, *Proposal to Establish Air Cargo Multidisciplinary Digitalization Task Force* co-authored by India, Ethiopia, Aruba, et al.:
https://www.icao.int/Meetings/a41/Documents/WP/wp_182_en.pdf
- Give deep consideration to participating in pilot implementations and share their experiences
- Undertake the necessary actions to provide a legal framework conducive to digital transport and trade



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Proposal to Establish Air Cargo Multidisciplinary Digitalization Task Force

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 on 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 *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 *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) Using the current PKD program 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.



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Backup

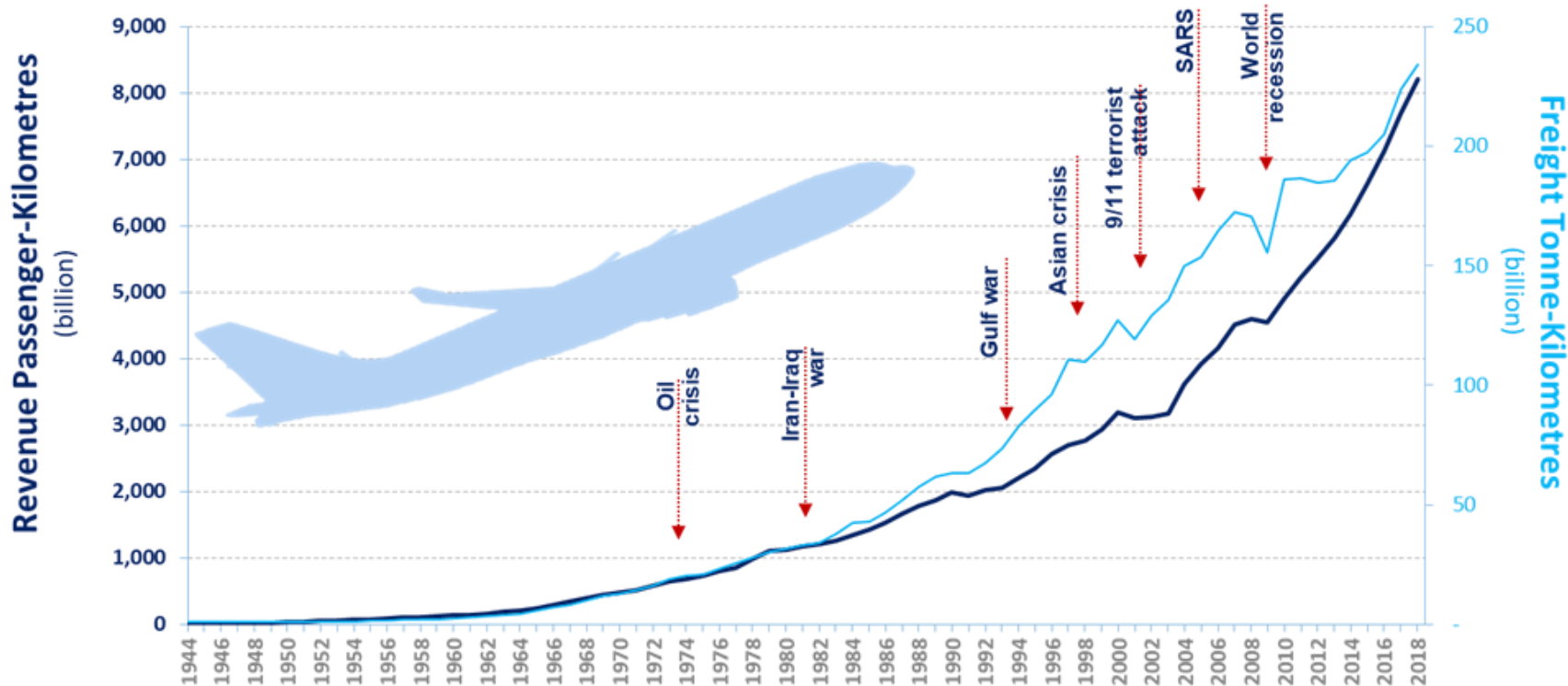


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Growth of air transport up to 2018





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MC99 Status Today

- 19 years after entry into force, 69% of ICAO's Member States (132 Parties) have now ratified MC99
- Most recent states to ratify MC99 include:
 - Nepal
 - Tunisia
 - Uganda
 - Sri Lanka
- The 'patchwork' of regimes that MC99 was designed to replace remains in place



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Why is MC99 Critical?

- It represents a win-win for all stakeholders
- Important protections and benefits for BCOs
 - Faster shipments for businesses that rely on air cargo
 - Reduction in administration, cargo litigation and ability to use electronic air waybills for supply chain actors (e.g., forwarders, carriers, customs authorities)
 - A practical, efficiency-enhancing trade facilitation measure to support global economic recovery



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MC99 Benefits Beneficial Cargo Owners, Among Other Stakeholders

	Warsaw Convention (1929)	Hague Protocol (1955)	Additional Protocol 2 + Montreal Protocol 4	Montreal Convention 1999
Cargo Liability	USD 20/kg	USD 20/kg	USD 25/kg	USD 29/kg
Provisions for electronic air waybill?	No	No	Yes (with other MP4 Parties only)	Yes



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Helpful links on this activity

Joint Statement by UN system entities on the Contribution of international trade and supply chains to a sustainable socio-economic recovery in COVID-19 times: [https://www.icao.int/Security/COVID-19/PublishingImages/Pages/Statements/\(%20English%20\).pdf](https://www.icao.int/Security/COVID-19/PublishingImages/Pages/Statements/(%20English%20).pdf)

UNDA *Transport and Trade Connectivity in the Age of Pandemics* project profile: http://www.un.org/development/desa/da/wp-content/uploads/sites/52/2020/08/2023X_Transport-and-Trade-Connectivity-in-the-Age-of-Pandemics.pdf



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ICAO *Priority Brief: Air Cargo*

Four considerations on the supply chain, its criticality for the emerging e-commerce driven marketplace, the needs for both regulatory evolution and digitalization

Five recommendations include those for digitalization and economic regulatory measures

Find it at:

https://www.icao.int/sustainability/Documents/ICAO-PRIORITY-BRIEF_Air-Cargo_2021.04.19.FINAL.pdf

We welcome your feedback



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PRIORITY BRIEF

