Webinar Report

Air Cargo Digitalization in COVID-19 Times: Perspectives on Security
(25 August 2021)

1. INTRODUCTION

1.1. The webinar *Air Cargo Digitalization in COVID-19 Times: Perspectives on Security* was successfully held on 25 August 2021 in collaboration with the Arab Civil Aviation Organization (ACAO) and in coordination with the UN Economic Commission for Europe (UNECE). The Webinar artifacts (e.g., full video recording, presentations) are publicly available online via ICAOTV: https://www.icao.tv/videos/air-cargo-digitalization-in-covid-19-times-perspectives-on-security

2. RUN OF SHOW

2.1. Mr. Mohamed Smaoui, Acting Regional Director of the ICAO Middle East (MID) Regional Office, and Eng. Abdennebi Manar, Director General of the Arab Civil Aviation Organization (ACAO) presented opening remarks. They were followed by the Facilitator of the Webinar, Mr. Cortney Robinson, Air Transport Officer (Air Cargo), Economic Regulatory Framework Section of ICAO who provided a detailed overview of ICAO's interests in and work to advance air cargo digitalization, including the ongoing multimodal collaboration with UNECE. Mr. Hussain Qabbani, Regional Officer – AVSEC, ICAO MID Office and Ms. Dina El-Karimy, Technical Assistant provided necessary support.

3. AGENDA (TIMES UTC) – COMPLETE AGENDA IS IN THE APPENDIX

    11.00 – Opening session
    11.10 – Overview presentation
    11.45 – Session 1 – Intersection of Digitalization and Physical Security
    12.55 – Session 2 – Air Cargo Cybersecurity in the MID Region and Beyond
    14.00 – Session 3 – The Interaction Between Air Cargo Digitalization and Security: Emerging
                        Challenges
    15.00 – Outcomes and closing remarks

4. ATTENDANCE

4.1. Fourteen organizations contributed panellists and the audience was over 100 over the 200 registered. While the webinar targeted the MID region, the audience was global. It included several participants from the APAC region, such as Hong Kong, SAR (China), Indonesia, and Thailand, as well as participants from various other ICAO regions, including SAM, EUR-NAT, and NACC. The participation level various from chief executives and DGCA executives to working level experts from States and industry.

5. DEVELOPMENT

5.1. This was the third of a series of ICAO webinars with the theme of air cargo digitalization. As its sub-theme, the webinar focused on the security aspects of digitalization, emphasizing that digitalization can improve overall air cargo security, among many other benefits.

5.2. ICAO and ACAO executives opened the webinar highlighting the above, with particular emphasis on the urgency that the COVID-19 pandemic has brought into long-running discussions. Specific reference was made to e-commerce trends and the role air cargo is increasingly playing in continuing those trends. The theme of partnership among stakeholders was prominent in the remarks

5.3. The ICAO facilitator provided an overview of ICAO activities around the topic of air cargo digitalization—including current and potential collaborations—with emphasis on how it intersects with security. There was clarification that the current air cargo digitalization activity supports current ICAO SARPs rather than being an activity to develop new ones and is partially in response to regulators requiring more data on cargo shipments. In the longer term, digitalization will urge regulatory evolution due to the benefits it enables and in response to emerging threats.

5.4. The moderator of Session 1, who represented the Global Express Association (GEA) began by providing background on the advances in electronic data interchange and pointed out the centrality of establishing trust among supply chain actors and also the importance of the recently joint statement in which leading air cargo associations called on ICAO to develop an economic regime specific to air cargo. The World Customs Organization (WCO) provided an overview of its agenda for digital customs and the importance of data models, such as the WCO Data Model, that act as anchors for interoperability. The International Air Transport Association (IATA) highlighted that the more States implement the current ICAO provisions and guidance material on *Air Cargo Secure Supply Chain* (Annex 17 Standard 4.6.2 and Appendix 30 of the ICAO Security Manual) and on the issuance of a security status or *Consignment Security Declaration* (CSD) (Annex 17 Standard 4.6.8 and Appendix 33 of the ICAO Security Manual), the more States could then recognize the quality of the supply chain and the approval process of RAs/KCs in other States; thus fully use alternatives of screening at transfer (Annex 17 Standard 4.6.5). IATA further noted that use of the electronic CSD (e-CSD) will allow for increased use of risk-based methods and artificial intelligence and concomitantly it will revise its *Resolution 651* to enhance the quality and usefulness of e-CSD and work with its current One Source platform for hosting a registry of approved RAs/KCs. The International Federation of Freight Forwarder Associations (FIATA) concluded the panel by providing an update on implementation of its Multimodal Transport Bill of Lading (FBL) and conveyed that trust and interoperability are essential in all digitalization efforts and this can only be achieved through collaboration between the different industry actors.

5.5. The second session opened with a brief overview from the moderator, who represented the International Port Community Systems Association (IPCSA). The United States Department of Homeland Security (U.S. DHS) introduced the W3C standards and underlying methodology of its emerging verifiable credentials initiative that could soon be a basis of collaboration with ICAO around air cargo digitalization. Founded on the principle of interoperability, this international initiative develops "in the open" needed, royalty-free standards that multiple vendors can use to

create an eco-system equipped with a true marketplace of secure credential solutions allowing information exchange across various domains without locking users into proprietary systems. The United Arab Emirates General Civil Aviation Authority (UAE GCAA) emphasized its experience in having a strategy for digitalization in place ahead of the pandemic, notably that it proved effective in enabling stakeholders to continue the conduct of frequent safety and security related data analysis and risk assessment during the Pandemic. Kale Logistics briefed on practical measures for air cargo security with emphasis on the MID region that highlighted cybersecurity—its value chain, vulnerabilities, and threats to cybersecurity. Kale offered practical advice for enterprises of all sizes and encouraged all stakeholders to take a community approach to security through Single Window controls like community platforms to reduce risks.

5.6. The final session, which provided a global view encompassing physical and cyber security, began with the moderator (UNECE) providing an overview of the UN Development Account *Transport and trade connectivity in the age of pandemics* project and its deliverables. GEFEG expounded upon the necessity of multimodal interoperability for the secure supply chain and detailed the various opportunities to service international conventions and regulations through harmonized information exchange data (e.g., mapping them to RDMs). ACAO provided details on the economic performance and potential of the MID region in air cargo and how digitalization efforts further enhance that potential. Importantly, ACAO advocated that ICAO develop a public key solution for air cargo similar to the public key directory (PKD) for passenger transport—a common database PKD for air freight. Embry Riddle Aeronautical University provided additional advice for aviation stakeholders considering how to digitalize air cargo and supply chain and further encouraged that ICAO serve as the global forum to advance this in a harmonized way. The Kingdom of Saudi Arabia General Authority of Civil Aviation completed the panel by providing an overview of its air cargo security e-services and the challenges it has addressed in making them effective, including data quality and availability, as well as integration with different systems for sharing. GACA also highlighted its use of a risk assessment tool and part of its overview of what air cargo e-services should provide.

6. OUTCOMES AND CLOSING REMARKS

6.1. The facilitator moderated the outcomes discussion and invited all participants to actively engage in it by sharing ideas, experiences, and perspectives. Outcomes and takeaways included:

6.1.1. Recommendation from the UAE GCAA that the upcoming ICAO High-level Conference on COVID-19 agree to establish a Multi-Disciplinary Working Group to be tasked with developing a cargo-specific regulatory framework that will foster sectoral growth in response to market needs and gives sufficient consideration to develop guidance material on digitalization of air cargo.

6.1.2. The UN Economic and Social Commission for Asia-Pacific (UNESCAP) proposed that ICAO and UNESCAP jointly organize a webinar to facilitate alignment between air cargo digitalization and digitalization of other trade sectors through the legal framework provided by the ESCAP Framework Agreement on Facilitation of Cross-border Paperless Trade in Asia and the Pacific, possibly as part of the ESCAP-ADB-ICC webinar series on accelerating cross-border paperless trade facilitation (https://www.unescap.org/event-series/paperless-trade-2021).

6.1.3. Air domain data models for the UNDA COVID-19 Phase 3 multimodal transport interoperability project are under review by the UN/CEFACT Bureau and should be publicly available soon.

6.1.4. States interested in pilot implementation of the UN/CEFACT standards for the UNDA project should contact UNECE and/or ICAO:

- Mario.Apostolov@un.org
- Crobinson@icao.int

6.1.5. Stakeholders and experts wishing to learn more about or contribute to the development of the W3C verifiable credential standards should visit: https://www.w3.org/TR/did-core/ (if interested in potential ICAO air cargo project, email: crobinson@icao.int).

6.1.6. Recommendation from IPCSA that ICAO and other stakeholders consider collaborative efforts, such as Cargo Community Systems, to share analysis & processes on cybersecurity, air cargo safety and other aspects of the movement of air cargo.

6.1.7. IATA identified mutual recognition within the Regulated Agent and Known Consignor regimes as needed more than ever now considering the ICAO drawdown of the Account Consignor regime.

6.1.8. Recommendation from Embry Riddle Aeronautical University that ICAO leverage academia as a resource in air cargo and across its portfolio.

6.1.9. Strengthen regional Cargo Security cooperation and capacity building.

6.1.10. States (Regulatory, Customs…) should take coordinated actions to implement CART recommendations.

6.1.11. ICAO and ACAO should encourage states to share information about threat and best practices to mitigate risks.

6.1.12. Stakeholders should support the role and efforts of ICAO and WCO for the PLACI implementation.

6.2. The facilitator thanked A/RD MID and his team for their leadership in matters relevant to air cargo and similarly thanked ACAO, while additionally acknowledging the 25th anniversary of that organization and its partnership with ICAO. A/RD MID concluded the webinar by thanking the distinguished panellists and encouraging States and other stakeholders to begin work on the outcomes in short order.

APPENDIX

Air Cargo Digitalization in COVID-19 Times: Perspectives on Security
Webinar - 25 August 2021, 11:00 – 15:30 UTC

11.00 – 11.10	**Opening Session** **Acting Regional Director, MID Office** **Director General of ACAO**

11.10 – 11.45	**Overview presentation** Cortney Robinson – Air Transport Officer (Air Cargo), Economic Regulatory Framework, Air Transport Bureau, ICAO

11.45 – 12.45	**Session 1 – Intersection of Digitalization and Physical Security** Moderator: Dietmar Jost – Customs and Security Advisor, Global Express Association (GEA) • Tejo Kusuma – World Customs Organization (WCO) • Matthew Vaughan – Director, Aviation Security & Cyber (ACyS), International Air Transport Association (IATA) • Lucelia Tinembart – Digital Project Officer, FIATA International Federation of Freight Forwarders Associations (FIATA)

12.55 – 14.00	**Session 2 – Air Cargo Cybersecurity in the MID Region and Beyond** Moderator: Mr. Richard Morton – DG, International Port Community Systems Association (IPCSA) • Anil John – Director, Silicon Valley Innovation Program, U.S. Department of Homeland Security • Amar More – CEO, Kale Logistics • Ahmed Wagih Wahbi – Senior Specialist, Dangerous Goods, United Arab Emirates (UAE) General Civil Aviation Authority (GCAA)

14.00 – 15.00	**Session 3 – The Interaction Between Air Cargo Digitalization and Security:** **Emerging Challenges** Moderator: Mario Apostolov – Regional Adviser, Economic Cooperation and Trade Division, UN Economic Commission for Europe (UNECE) • Michael Dill – CEO, GEFEG • Abdennebi Manar – DG, Arab Civil Aviation Organization (ACAO) • Dan Diessner – Senior Research Scientist – Aviation Cybersecurity, Embry Riddle Aeronautical University • Talal Alhazmi - Supervisor, Air Cargo Security Dept., Kingdom of Saudi Arabia General Authority of Civil Aviation (GACA)

| 15.00 – 15.30 | **Q&A, Outcomes and closing remarks** |
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