International Civil Aviation Organization

WORKING PAPER

ATConf/7-WP/22[1]
23/9/26
(Information Paper)

SEVENTH WORLDWIDE AIR TRANSPORT CONFERENCE (ATCONF/7)

Montréal, HQ, 16 to 20 November 2026

Agenda Item 4: Emerging technologies, new business models and other associated aspects
4.3: Leveraging air transport data and the digital ecosystem for seamless, secure and resilient operations

ENABLING GLOBALLY INTEROPERABLE DIGITAL IDENTITY FOR SEAMLESS AND SECURE AIR TRAVEL

(Presented by the International Air Transport Association (IATA) and Airports Council International (ACI))

EXECUTIVE SUMMARY

Global air passenger numbers are expected to grow substantially in the future, but airport infrastructure development cannot keep pace. Digital identity (DI) and biometric-enabled processing will be vital to ensure that this anticipated growth can be met by enabling passengers to prove their admissibility status before departure and navigate airport processes more smoothly, securely, and efficiently.

However, DI adoption is increasing in a fragmented way across different jurisdictions, technologies, and stakeholders. Without greater international coordination, there will be a patchwork of incompatible national systems, proprietary wallets, trust frameworks, and inconsistent passenger experience. Thus, States, the International Civil Aviation Organization (ICAO), and industry have shared interests in enabling a globally interoperable digital travel credential. Achieving this will require the support of States and the leadership of ICAO to advance harmonized standards, interoperable trust frameworks, and regulatory recognition of digital travel credentials.

1. INTRODUCTION

1.1 Passenger facilitation, border management and customer experience will increasingly depend on digital identity (DI) in the future. States are already tightening entry requirements, expanding data obligations and introducing national or regional DI schemes. Airlines are required to ensure passenger compliance with the entry requirements of destination and transfer countries, often through manual or semi-manual document checks, while facing penalties and operational consequences when passengers are found inadmissible.

1.2 Global air passenger traffic is expected to double by 2041. Building ever-larger airport terminals and infrastructure to accommodate this will be increasingly difficult. Automation, digitalisation,

[1] English, Arabic, Chinese, French, Russian and Spanish versions provided by IATA.

and more efficient passenger processing are therefore essential to handling anticipated growth, maintaining security and improving efficiency and service quality.

1.3 DI can help to address these challenges by enabling passengers to prove who they are, demonstrate that they meet applicable travel requirements, and move through the journey using trusted digital credentials and, where appropriate, biometric recognition.

2. DISCUSSION

2.1 DI is no longer a future concept for aviation. Governments are already deploying digital identity ecosystems, major technology platforms are offering wallet-based digital credentials, and airlines and airports are exploring digital credential solutions to improve throughput and reduce manual processing. Passenger expectations are also shifting. The International Air Transport Association's (IATA) Global Passenger Survey (GPS)[2] notes that biometric use at airports increased from 46 per cent in 2024 to 50 per cent in 2025, with satisfaction among biometric users reaching 86 per cent.

2.2 Benefits for States, Industry and Passengers

2.2.1 For States, DI enables earlier and more accurate risk assessment, it strengthens border security, reduces document fraud and allows border authorities to focus resources on higher-risk cases while facilitating low-risk passengers.

2.2.2 For airlines, adopting DI in document checking process can decrease the need for manual document checks, enhance passenger data accuracy and quality, lower the likelihood of admitting ineligible passengers, for example with fraudulent documents, and minimize operational disruptions.

2.2.3 For airports, processing passengers whose documents have already been checked before they reach the airport can help reduce terminal congestion and improve the use and efficiency of scarce infrastructure.

2.2.4 For passengers, DI can provide a faster, more convenient and seamless experience overall, while retaining control of their personal data by giving their informed consent before sharing credentials.

2.3 Overcoming barriers to adoption – urgent support is needed from States

2.3.1 States should establish enabling legal and regulatory frameworks that allow DI credentials to be used across the passenger journey. This includes recognizing digital credentials in airline and airport processes, enabling use of government-issued and device-native wallets where appropriate, and ensuring that national DI frameworks explicitly incorporate aviation use cases and recognize airlines and airports as trusted participants. As an initial step, States should permit the reading of the ePassport chip data, the secure storage of that data in a secure traveler-controlled digital wallet, and its use by airlines and airports for relevant travel processes.

2.3.2 States are encouraged to participate in or support pilots and trials with airlines and airports. This will allow authorities to assess risks, validate technologies, develop evidence, identify regulatory

[2] IATA conducts a Global Passenger Survey (GPS) annually to understand passengers' evolving preferences and behaviors in travel and ensure the industry's future vision and strategic directions are aligned. https://www.iata.org/en/publications/manuals/global-passenger-survey/

adjustments and build confidence before large-scale deployment. Government participation also helps ensure that DI solutions meet both regulatory and operational requirements.

2.3.3 States issuing DI credentials for travel should align those credentials with global standards, including ICAO Digital Travel Credential (DTC) and relevant International Organization for Standardization (ISO) frameworks. Avoiding divergent national approaches is critical to ensuring cross-border usability and international interoperability.

2.3.4 States should work towards mutual recognition of national DI trust frameworks so that credentials, issuers, wallets and verifiers recognized in one jurisdiction may be trusted in another. Pending full mutual recognition, States may consider recognizing the IATA One ID framework as a common trust baseline for airlines and airports to reduce duplicative accreditation and support cross-border implementation. States may consider exploring the use of a DTC in their processes, such as for pre-screening, building on the ICAO DTC trust framework.

2.3.5 States should modernize pre-travel verification by simplifying and digitizing travel document requirements, making requirements machine-readable, and linking visa or authorization status to interactive Advance Passenger Information systems where available. States are also encouraged to adopt digital travel authorizations where relevant, enabling more direct communication between governments and passengers. States can consider allowing the use of DTC in their travel authorization application or declaration processes, where applicable.

2.4 The critical role of ICAO

2.4.1 ICAO could further encourage States to consider the actions suggested above and strengthen coordination between ICAO, ISO, regional/national frameworks and industry to ensure that digital identity standards support aviation use cases and remain globally interoperable.

— END —