

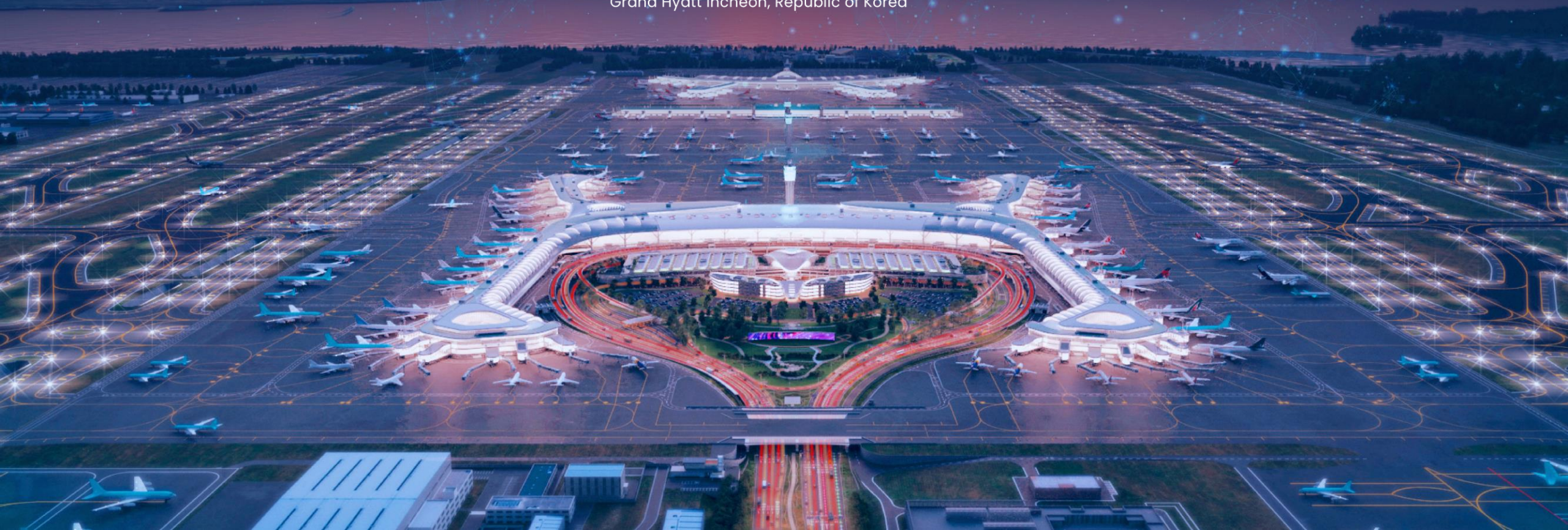
제8회 세계항공컨퍼런스

# WORLD AVIATION CONFERENCE 2025

The Future of Aviation Industry: Advanced Tech and Sustainability

September 2(Tue) - 4(Thu), 2025

Grand Hyatt Incheon, Republic of Korea





# Paperless Travel – Interoperability Perspective

Louise Cairney

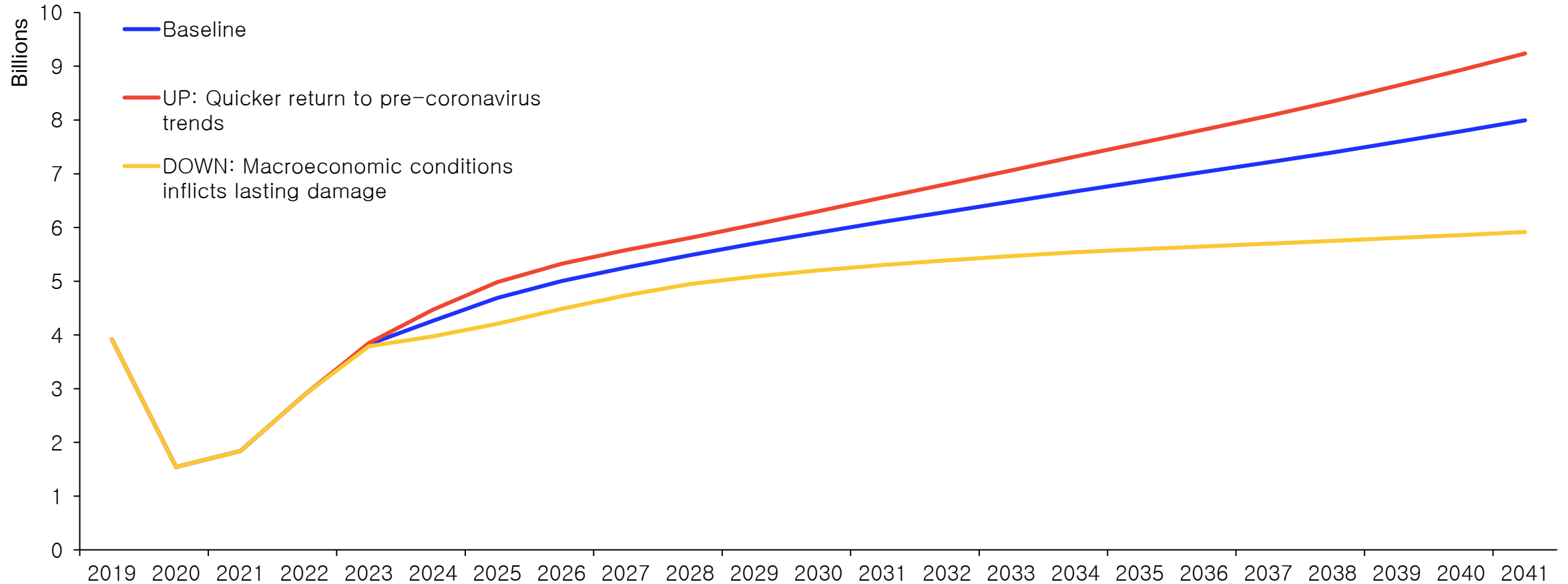
Head, Customer Experience  
& Facilitation IATA



# Passenger traffic expected to double v2019 by 2041


## The balance of risks remains tilted to the downside

### World passengers



Source: Tourism Economics/IATA Sustainability and Economics





Building ever larger airports will be increasingly difficult, if not impossible.

The industry needs to implement automation, digitalization, and efficient processes to handle this growth.



# Speed is the essence at the Airport

Maximum desired time to get to the gate (without shopping, dining, etc.)



**Less than 30min**

for 72% of the passengers with a carry-on bag only



**Less than 45min**

for 76% of the passengers with a carry-on bag and checked-in bag



**Less than 1h**

for 79% of the passengers with mobility aid or special assistance



# To save time, travelers are willing to complete processes before airport arrival

**89%**

said they would be interested in a **trusted travel program** to get them through security faster

**86%**

of passengers like to obtain a **visa before traveling**

**45%**

would like to **complete immigration procedures** before arriving at the airport

**36%**

would like to complete **check-in** before arrival at the airport





**Vision:** Passengers arrive at the airport 'Ready to Fly' – all documents have been checked remotely and in advance – and experience a **contactless journey** through biometric identification

One ID aims to transform passenger processing using **Digital Identity** technologies



# Vision with technology

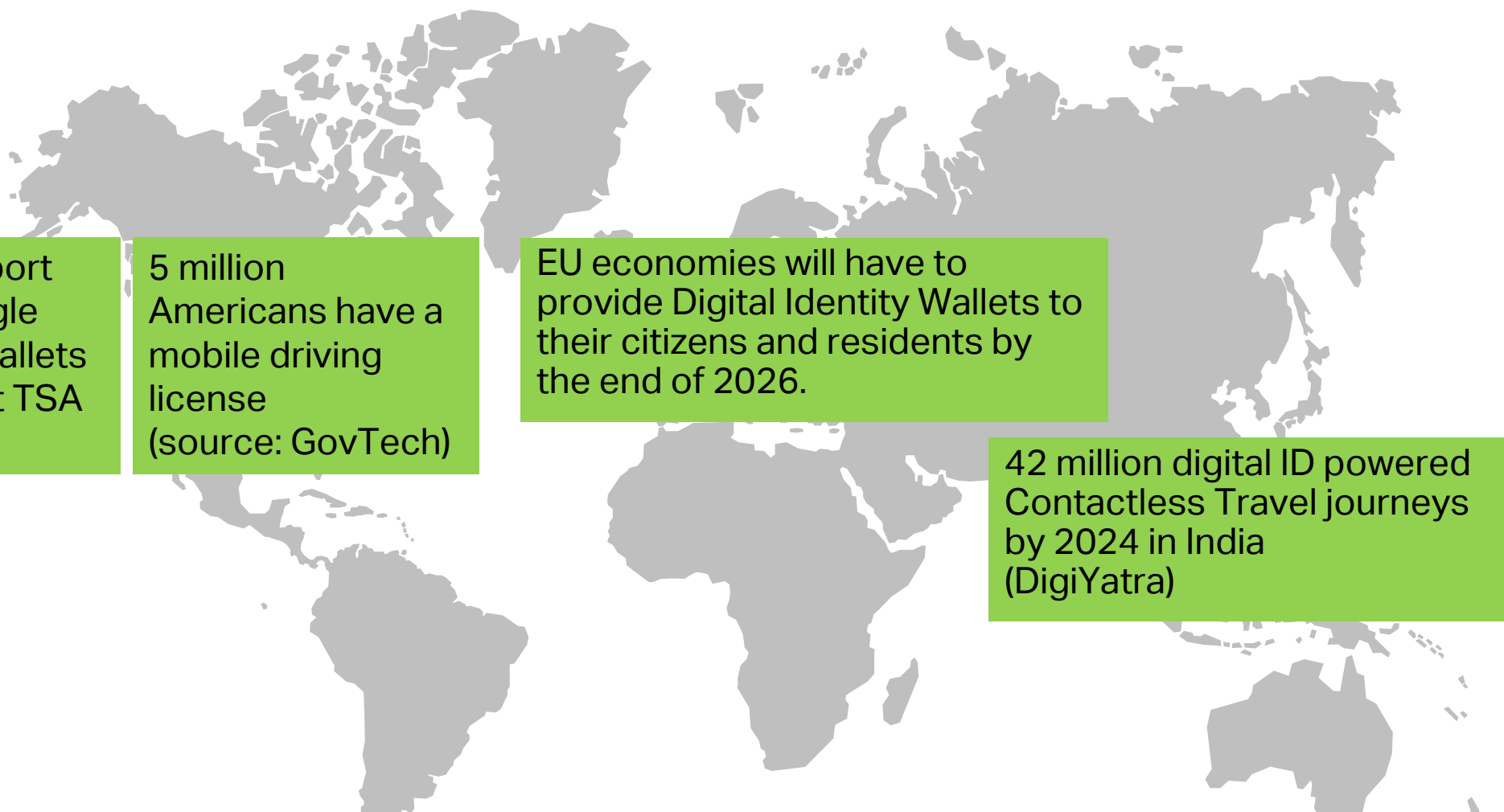


## What it means for passengers:

- They can **store credentials** needed for travel, such as passport, visa, etc. in their **digital wallet**.
- They can **share those credentials with other parties** as relevant, upon consent, e.g. airlines, airports, governments, etc. **in advance** before they reach the airport.
- They can **complete processes remotely**, off airport, and they can go through touchpoints at the airport **with biometrics recognition only** without having to show their documents.
- They can use the same credentials, as applicable, **for the next journeys**.



# Adoption ramp up



Digital Passport copy in Google and Apple Wallets to be used at TSA checkpoints

5 million Americans have a mobile driving license  
(source: GovTech)

EU economies will have to provide Digital Identity Wallets to their citizens and residents by the end of 2026.

42 million digital ID powered Contactless Travel journeys by 2024 in India (DigiYatra)

By 2026, over 500 million people will regularly make verifiable claims using a digital identity wallet.  
(source: Gartner)





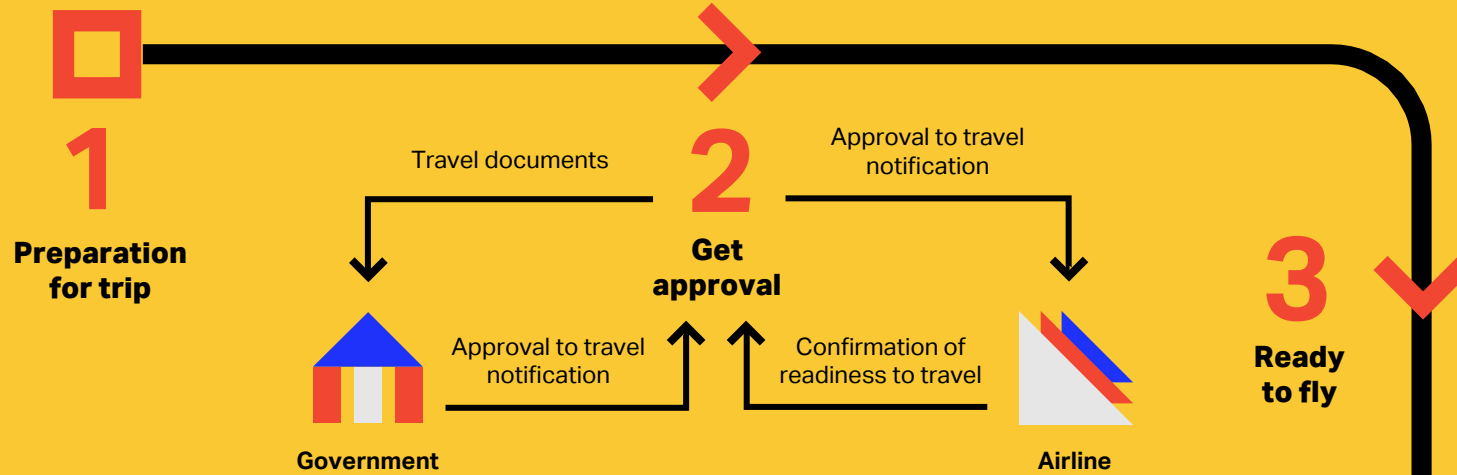
**Digital Identity**  
enables **Customers** to  
have control of their data  
and benefit from an  
intuitive, seamless and  
personalized journey



## Step 1

Passengers digitally prepare and store essential travel documents in their digital wallets.

## Digitization of admissibility



## Step 2

Documents are shared with the authorities of the destination countries for pre-travel approval, with notifications stored in digital identity wallets.

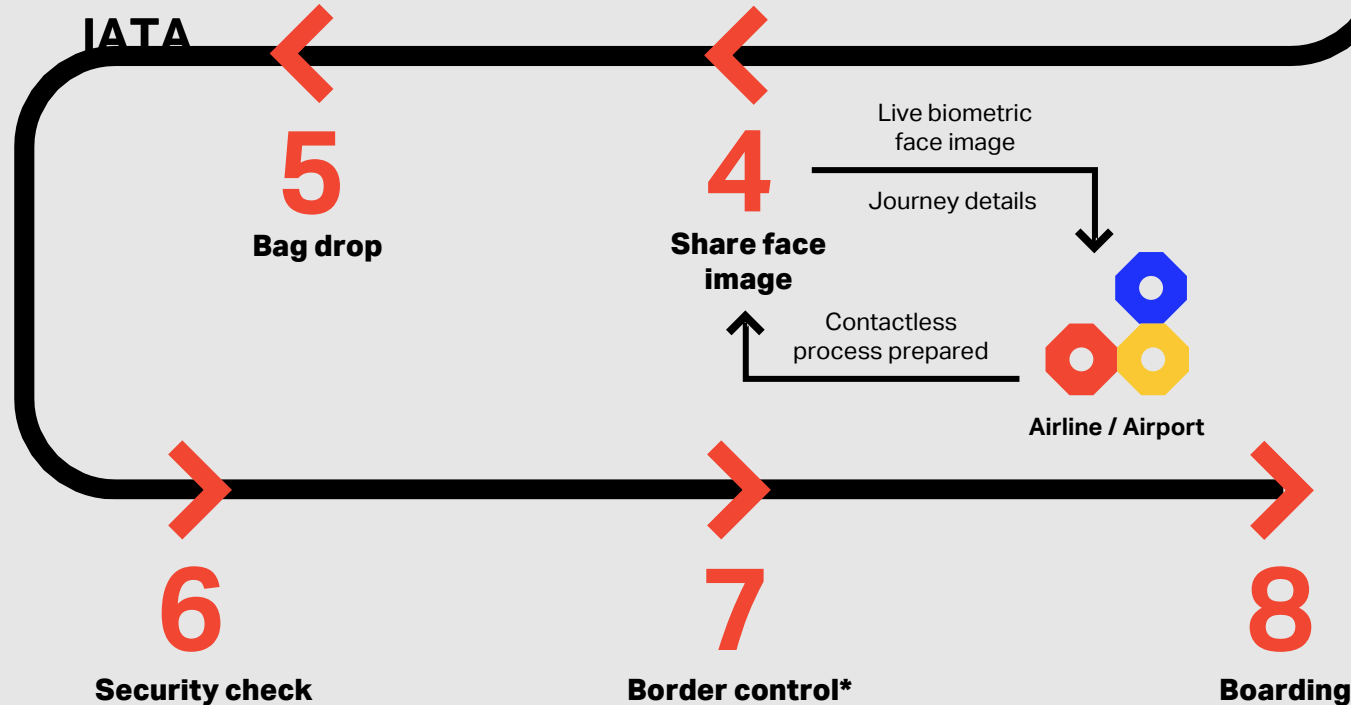
## Step 3

Passengers verify their admissibility with airlines through digital identity wallets, confirming they are ready to fly.

## Step 5 - 8

Biometric data enables passengers to navigate airports without physical document checks for bag drop, security, border control, and boarding.

## Contactless travel



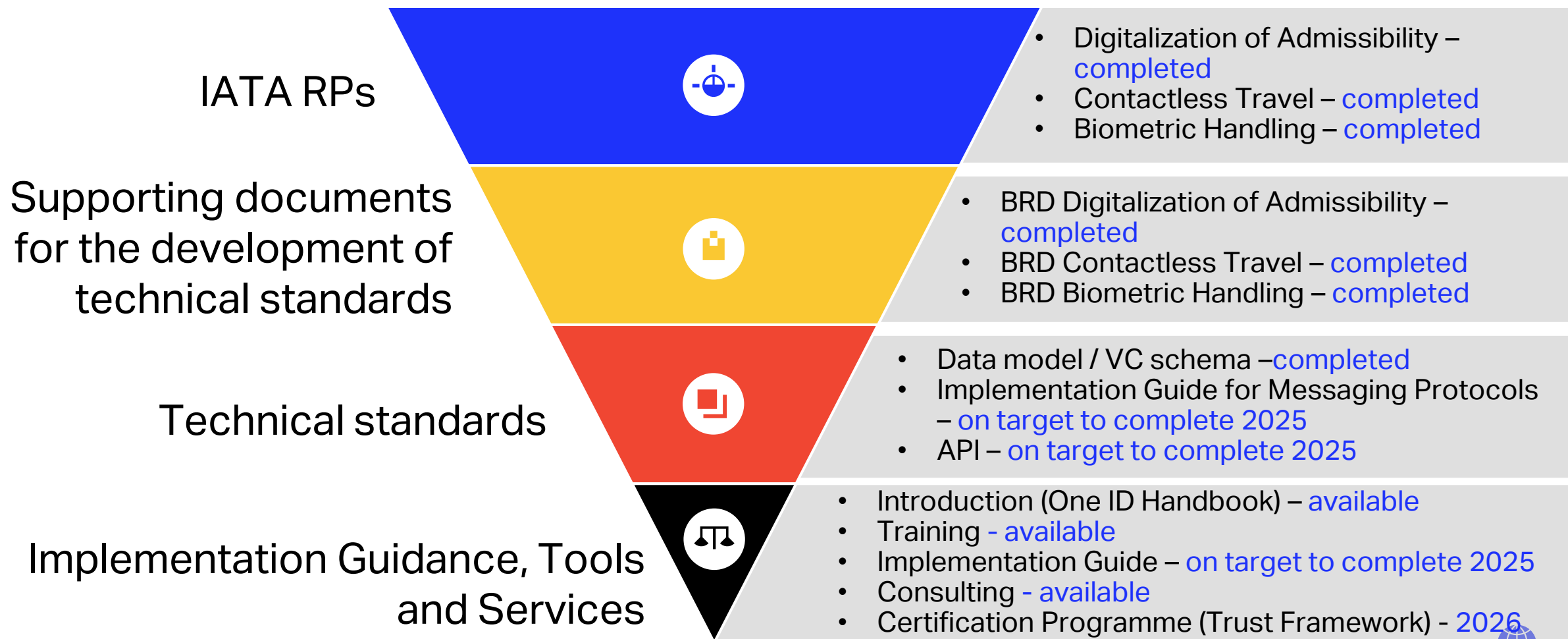
## Step 4

When a contactless process is available at the airport, the passenger is offered that experience. The passenger can choose to share their biometric face image and journey details with the party responsible for the contactless process in that location.

\*Border control is out of One ID standards scope and passengers may be required to show their physical passport by the authority



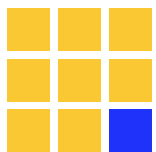
# One ID Standards – Status



There are already more than 100 implementations of biometric travel around the world but each with their own enrolment - how can these harmonize?



# The building blocks for harmonization



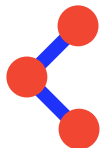
## Industry standards for interoperability

IATA One ID, Verifiable Credentials, and APIs



## Intuitive customer experience

Consistent behavior for customers prompts to share different credentials for different purposes



## Compatibility with the existing biometric systems

Digital Identity credentials need to be used to enroll for current biometric processes.



## Trust is essential

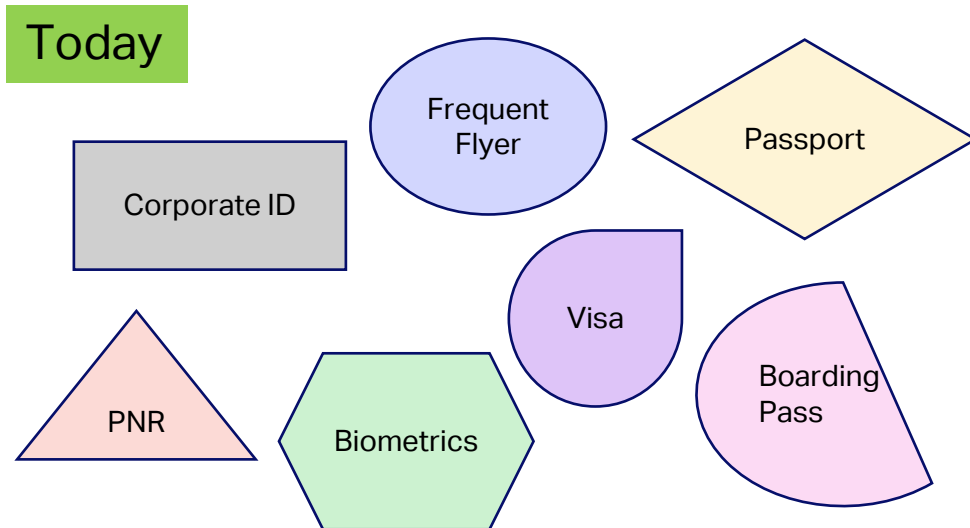
Frameworks that increase the trust probability are the key to unlocking the real potential of digital identity.

# IATA Proof of Concept 2024





# What was the PoC?



Different credentials are in different formats and managed differently. Passengers use different applications or platforms to use these credentials for travel.



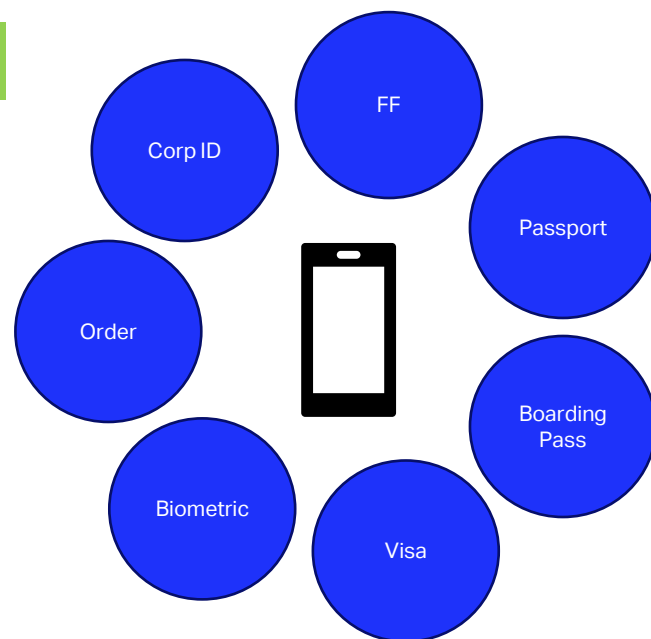
**Hong Kong Flight Token:** Enroll biometrics at check-in or at e-Security Gates



**Narita Face Express:** Enroll biometrics at a kiosk

# What was the PoC?

PoC



**Digital credentials** are stored on a digital wallet and can be used for **from shopping to travel**; the same credentials can be used for Flight Token and Face Express **in a live environment without separate enrolment**.

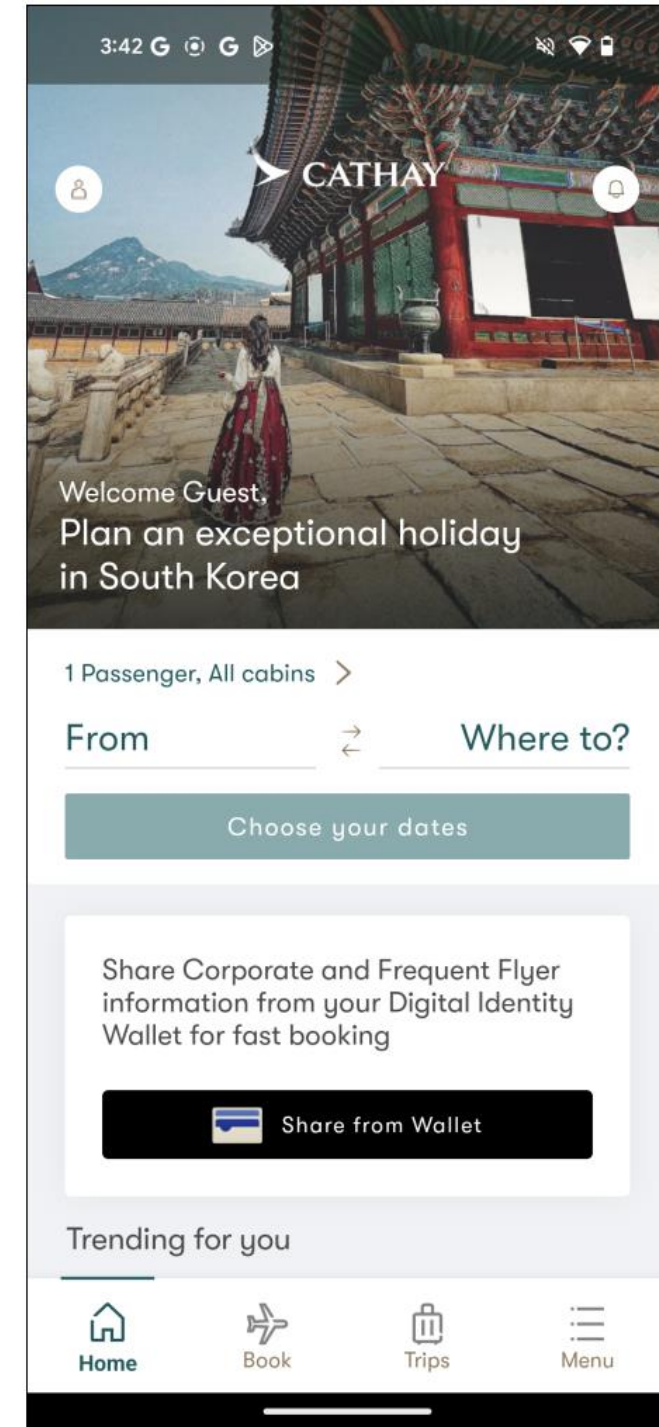
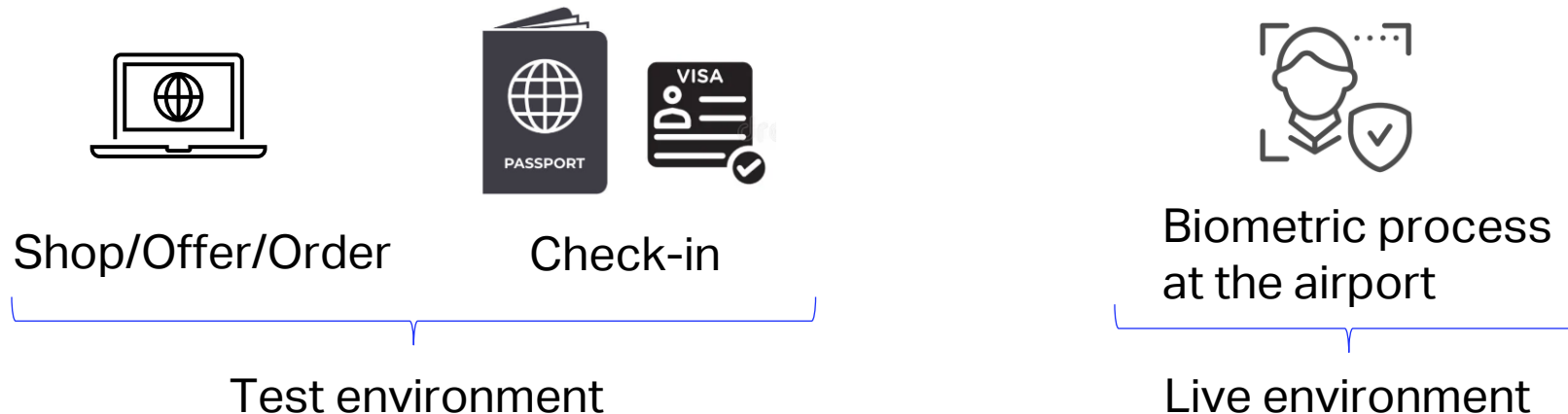


# How was it built?

## What we needed:

- Industry partners – 1 airline and 2 airports with biometric systems in place
- Tech providers – 1 airline (test) app provider, 2 wallets, 2 verifiers, 2 credential issuers
- Standards for VC schema and interoperability profile for messaging protocols

## Combination of processes in a test and live environment



# 2024 PoC team





# Journey: Hong Kong to Narita and Return

## Customer 1

- Corporate traveler
- CX frequent flyer
- Visa not needed
- ePassport digital copy and live biometric image already stored in the wallet



## Customer 2

- Corporate traveler
- No membership with CX
- Visa needed
- ePassport digital copy and live biometric image already stored in the wallet



# Key highlights



## Enhanced interoperability

Interoperability with multiple issuers, verifiers and wallet providers

Interoperability with existing biometric systems in Hong Kong (Flight Token) and Narita (Face Express)



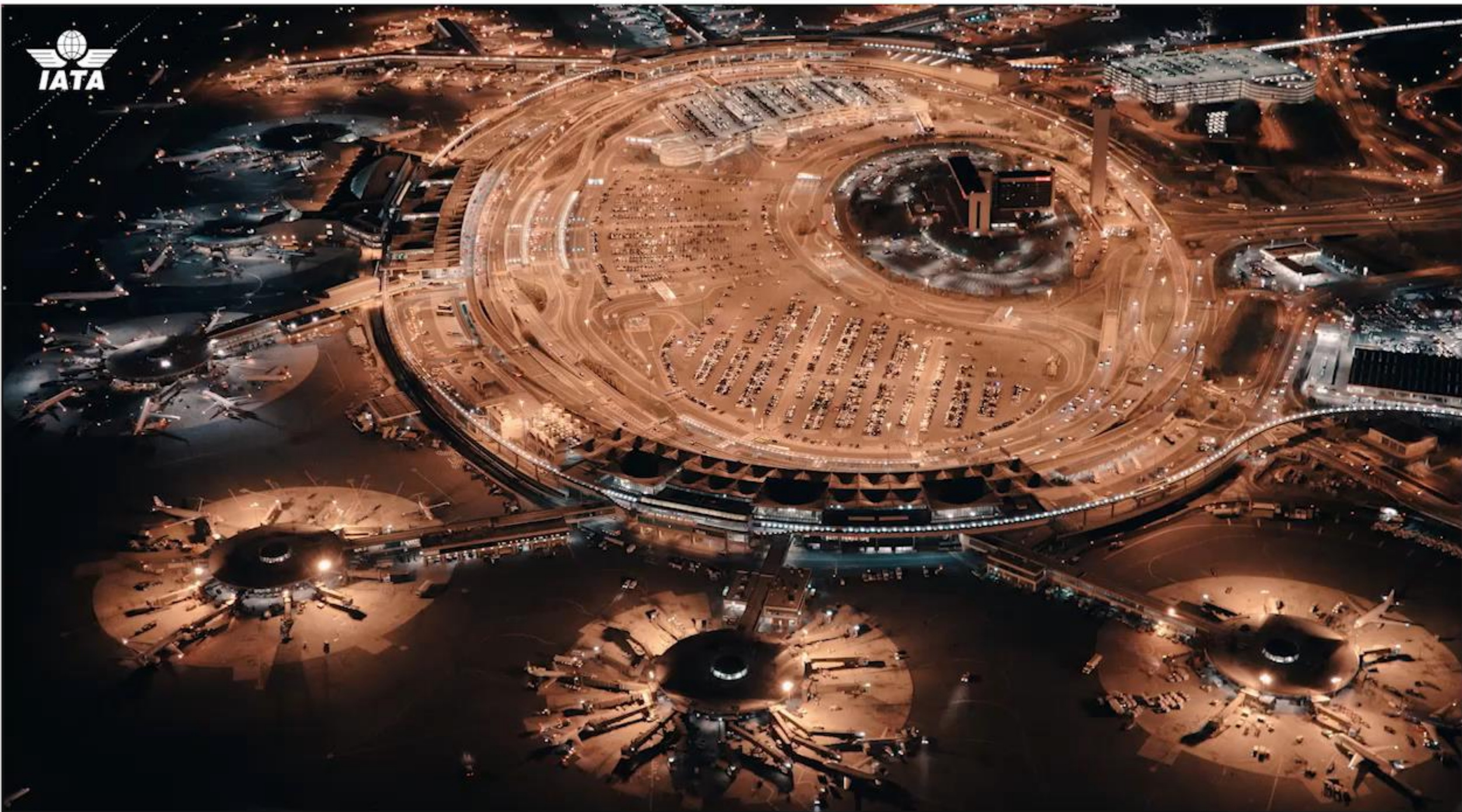
## Improved standards

One ID standards – VC schema for Passport, Visa, Boarding Pass, Live Biometric Image

Other pre-standards – VC schema for Frequent Flyer membership, Employee proof, Order

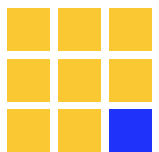
Technical Guidance for Digitalization of Admissibility







# PoC Outcome



## Confirmed the importance of the **standards for interoperability**

Some adjustments may be needed to the current standards

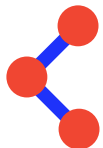
Additional standards may be needed, e.g. Order VC



## Confirmed improved **customer experience**

Without any booking reference or login password, easy access to booking is possible

Intuitive, consistent behavior in sharing different credentials for different purposes



## Confirmed the **compatibility with the existing biometric systems**

Digital Identity credentials can be used for current biometric processes.

Standards on live biometric images may need to be further reviewed.



## Discovered potential **challenges and opportunities**

Trust issues and opportunities to overcome

Engagement with the Government was essential

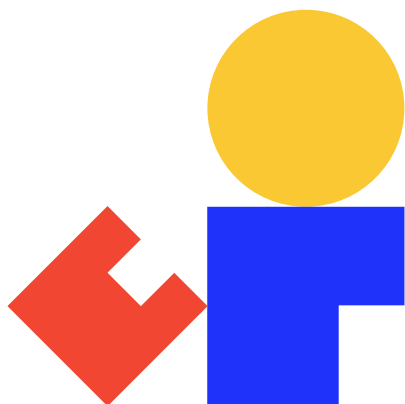


# What is next for One ID

## Digital Identity is Ready for Travel Today

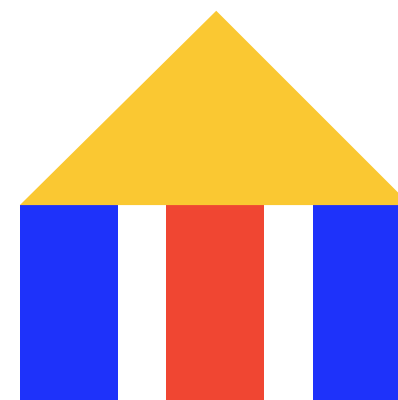
- One ID standards
- IATA guidance and services

**> Ready for implementation today!**



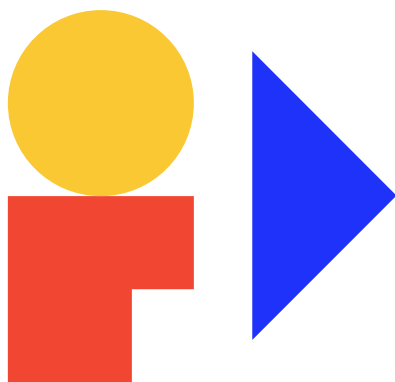
## Trust Framework

- Government and Industry approaches to ensure trust in the ecosystem are in development
- Removal of obstacles depends on collaboration



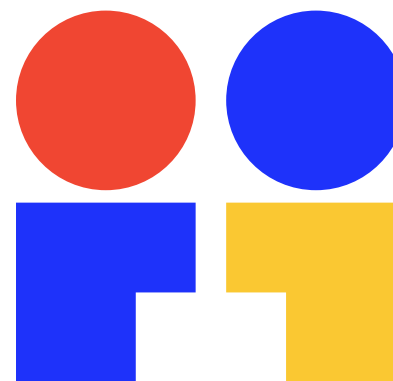
# Airports' support is needed

If you already have biometric processes in your airport, **try digital identity credentials** – by accommodating One ID credentials in the current biometric process. (and share your learning with us).



If you plan to implement biometrics at your airport, involve airlines from the beginning and design the process together.

Align with the industry standards on digital identity and biometrics.





# Q&A

## IATA One ID resources



**One ID Handbook**



**One ID Training**

# Thank you!

Louise Cairney

IATA Head Customer Experience &  
Facilitation

[cairneyl@iata.org](mailto:cairneyl@iata.org)

[IATA One ID](#)

