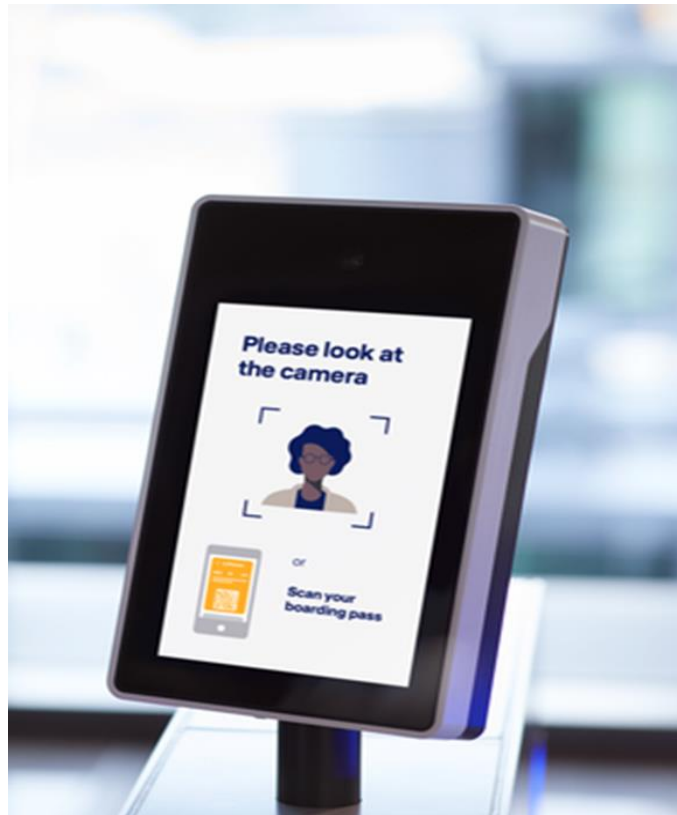




Digital IDs & Biometrics: The Customer`s Perspective

Lufthansa Group: Ground Product Customer Solutions & Industry Standards

Patrick Sgueglia, IATA WPS 2025



Our current view | Biometrics & Digital IDs in general

- Biometrics & Digital IDs improves the ground journey & relieves staff from workload
- It is scaling up world-wide
- We want to test, run and master this advancing technology
- Progressive development of industry standards, many stakeholders need to be managed
- Regulatory framework is challenging (especially in Europe)

What | LHG Biometrics at a glance : testing & shaping technology development

Facial recognition



- 150k Enrolments in new Star app
- 50k shared biometric profiles with BP
- 1,5mio p.a. One step-exits in the US

Data since start of start SBH 2.0

Touchpoints (examples)



- Bag Drop
- Check in
- Security
- Lounge
- Gate
- Biometrics@Border
- Interoperability
- Link to digital travel credentials
- EUID digital wallet
- Walk-through experience
- Boarding w/o fixed gate staff
- DTC

Established

Today's trials

Learning/ Scaling

Exploit future potential

t

Why | Biometrics potential: customer, airline, airport & regulatory benefits

- **Passenger Convenience:** touchless, hassle-free experience
- **Enhanced Security:** accurate ID and improved surveillance
- **Operational Efficiency:** faster processing, fewer bottlenecks
- **Regulatory Compliance:** meets security standards
- **Cost Savings:** reduces personnel costs, optimizes resources
- **Future-Proof:** adapts to technical advancements, competitive edge



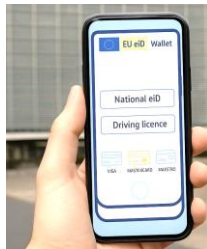
Prerequisite for combining with Digital Travel Credentials to further automate airport touchpoints

Outlook I combining EUDI wallet for trusted identity and OneID for seamless biometric travel ensures EU compliance and industry interoperability

Who am I? Verified Identity

EU Digital Identity Wallet (EUDI Wallet):

- EU-wide digital identity solution, mandatory for all member states by 2026
- Enables **secure storage and sharing of identity credentials and attributes**
- Potential for integration of DTC functionality to create Europe-wide interoperability



Digital Travel Credentials (DTC):

- Digital, verifiable representation of travel documents (passport, visa) on mobile devices, based on ICAO standards
- Biometric data is stored securely and encrypted on the smartphone
- Status: Pilot projects already underway (incl. Finland, Canada, Singapore, etc...)

How do I travel? Biom. token for airport touchpoints

IATA OneID:

- Industry standard for end-to-end biometric passenger processing across all touchpoints
- Concept: **token-based system – one-time biometric registration**, followed by use without physical documents
- Seamless travel from check-in to boarding



Biometric Check-in



Biometric Security Control



Biometric Boarding




Entry/Exit System (EES):

- EU border control system for automatic registration of third-country nationals
- Replaces manual stamps, records biometric data (face, fingerprints)
- **Long-term potential for automation**






Biometric Border Control

Strategic Setback | facial recognition at European airports faces regulatory constraints – EDPB declares key models incompatible with GDPR

 Data protection compliant					
Scenario	Storage Location	Control of Encryption Key	Comparison Type	Retention Period	EDPB-Assessment
1. Local Storage on Passenger Device	Passenger's personal device	Passenger only	1:1	Controlled by passenger	 Potentially compliant with GDPR if safeguards are in place
2. Centralized Airport Storage (Encrypted)	Airport infrastructure	Passenger only	1:1	Valid for a defined period (e.g., up to 1 year or passport expiry)	 Potentially compliant with GDPR if safeguards are in place



 Not compliant with data protection regulations					
Scenario	Storage Location	Control of Encryption Key	Comparison Type	Retention Period	EDPB-Assessment
3. Centralized Airport Storage (Operator-Controlled)	Airport infrastructure	Airport operator	1:N	Typically, 48 hours, deleted after flight departure	 Not compliant — exceeds necessity and proportionality
4. Cloud Storage by Airline or Provider	Cloud infrastructure	Airline or cloud provider	1:N	Potentially indefinite (e.g., tied to customer account)	 Not compliant — high risk of scope creep and unauthorized access

[Opinion 11/2024 on the use of facial recognition to streamline airport passengers' flow \(compatibility with Articles 5\(1\)\(e\) and\(f\), 25 and 32 GDPR\)](#) | European Data Protection Board / [\[eudrim.eu\]](#)

Facial recognition at airports: individuals should have maximum control over biometric data | European Data Protection Board





Backup

Scale | LHG & Star initiatives for expanding interoperable biometric services

Star Alliance Biometrics (SBH)

Airlines:

Live: LH, LX, OS, TK, **planned:** SN, TG, TP, A3

HUB FRA

3 Security Gate (L) **17** QBG (L)

HUB MUC

13 Security Gate (L), **20** LHG QBG (L)

1 Lounge Gate (L)

14 Self Bag Drop (SBD) (P) Q1/25

65 QBG (P) Q4/25

HAM

1 Security Gate (L), **3** QBG (L)

HUB VIE

2 Security Gate (L), **2** QBG (L), **1** Lounge (P) OCT 24

IST

2 QBG IK* (L), **10** QBG IK (P)

SBH featuring further biometric provider

Sita Smartpath:

HUB FRA - **3** Security Gate (P) **3** QBG (P) Sep 24
87 QBG (P) Q3/25

NAP - **1** Security Gate (P) **1** QBG (P) **1** Kiosk (P)
NOV 24

BKK – 100 % equipped Security Gate & QBG (P)
DEC 24

planned:

PRG, SKG, FCO, LIN



Vinci AP – LIS, OPO, FAO, FNC (P)

Thales – LIN (L), MXP, BRU, FCO, SIN (P)

RFP process - provider open:

HUB VIE, HUB ZRH, BUD

1-Step Biometrics – US-Exit

USA Airports

All stations biometrically enabled until end of 2024

CBP Trial: Biometric Exit Trial for Crews in planning

HUB FRA

SBD - Identity Check for flights into US (P) DEC 24

TSA Doc Check – Identity Check & Doc Check before boarding (P) Q1/25

HUB MUC

SBD - Identity Check for flights into US (P) Q1/25

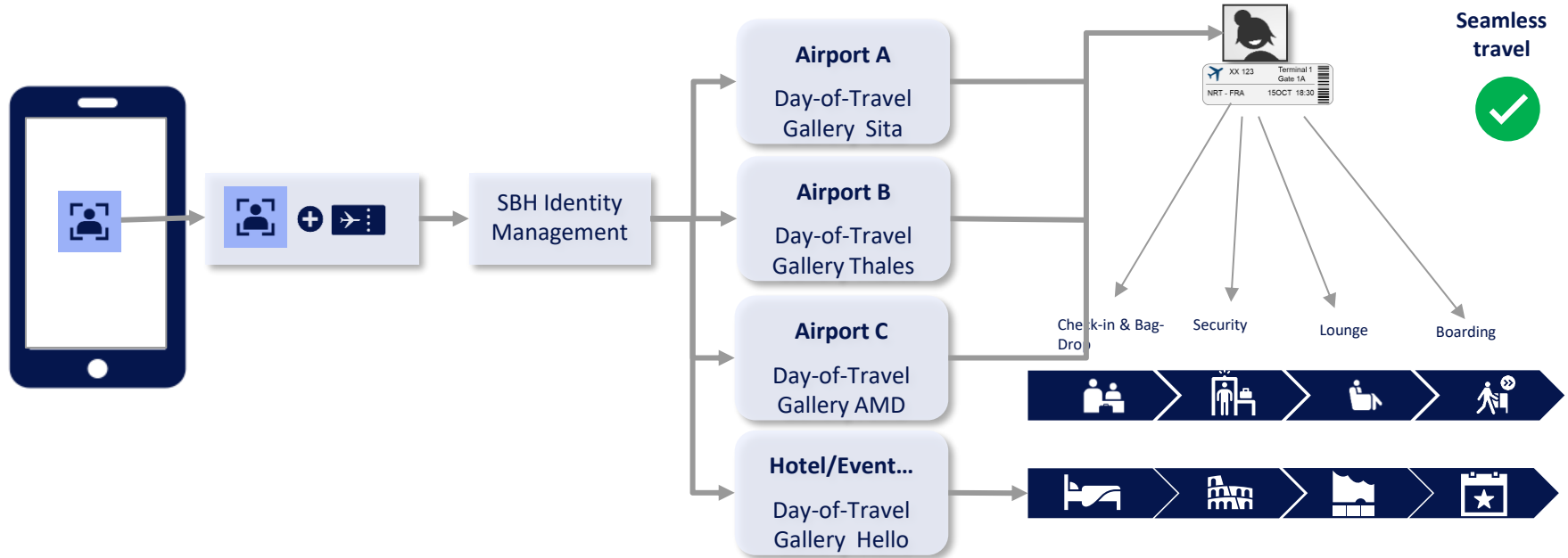
TSA Doc Check – Identity Check & Doc Check before boarding (P) Q2/25

Fraport § 8 LuSiG

HUB FRA: Fraport to establish 100% Biometrics until 2027, affecting crews, collaboration in evaluation

Future | Convenience of seamless travel

A **one-time enrolment** with a provider and an **identity management system** is all that is required to use **biometric identification at airports and with partners combining Biometrics & Digital IDs**.



Partner interoperability is key for the biometrics journey

Requires collaboration from & standards for Airlines, Airports, Service Providers and National Authorities



LUFTHANSA GROUP

EU ID Digital Wallet Consortium I Planned Output

WP2 Digital Travel Credentials Use Case Application

WP Lead: SICPA

WP Co-Lead: GenDigital

- User Journey:
User engagement & User experience
- Travel Credentials:
Issuing & Verification
- Payment Credentials:
Issuing & Verification

2

WP3 Wallets application and PID/ODI

WP Lead: University of Piraeus Research Center

WP Co-Lead: Archipels

- Wallets:
EUDI Wallets & Organizational wallets
- PID/ODI & Org.-Credentials:
Issuing & Verification
- Business Scenarios:
Design & Piloting

3

WP4 Interoperability and Infrastructure

WP Lead: Signicat

WP Co-Lead: Intesi

- Interoperability:
Specifications & Governance
- Trust Services:
(Q)EAA and Credentials & Signing and Sealing
- Infrastructure & Testing:
Interoperability testing & Shared Infrastructure

4

WP1 Project Management & Coordination

WP Lead Bolagsverket

WP Co-Lead: msg

- Project Management & Financial Administration
- Quality Assurance & Risk Management
- Innovation & Technical Management
- Legal & Ethical Aspects
- Pilot Coordination

1

WP5 Dissemination, Communication and Exploitation

WP Lead: msg

WP Co-Lead: Finnish Ministry of Finance

- Communication Dissemination Strategy
- Exploitation Strategy & Action Plans
- Stakeholder Outreach & Sustainability
- Impact Booster
- Standardization

5

User Journey - EUDI Wallet Consortium

Members - EUDI Wallet Consortium