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Health Travel Pass The key to safely reopening borders





The Covid-19 pandemic has created substantial global disruption. Today, reopening borders and resuming international travel is necessary in order to restart the global economy. However, distrust concerning the status of a traveler's health remains an obstacle.

Governments and the aviation sector are looking for a secure interoperable solution to prove a traveler's health status when crossing borders. In that context, global standard setting bodies as well as the European Union have been developing regulations and a global framework to enhance the security and interoperability of health certificates. Governments, international bodies and representatives of the aviation sector are collaborating with technology experts to develop robust and safe solutions that will allow citizens to travel.



Preventing fraud during a global pandemic

ust as with identity documents, counterfeit health certificates are in circulation. Additionally, the demand for counterfeit certificates has increased since countries started to administer vaccines. Not only is fraud a significant risk to public health but it also complicates the process of safely reopening borders.

At IDEMIA, we believe it is our duty to contribute to economic recovery within the sectors that have been greatly affected by the pandemic. Our fraud-proof solution complies with international aviation and health standards while maintaining privacy requirements for health records..

IDEMIA's Health Travel Pass

From the issuance of health certificates to verification tools, IDEMIA proposes an end-to-end solution. It comprises of a Health Pass trusted infrastructure, a Health Pass for travelers and a Health Pass verification solution based on international standards.

IDEMIA's solution covers all types of health certificates including, among others, PCR and immunity tests, proof of vaccination, certificates of recovery.

With a privacy-by-design approach, a traveler's personal health information is safe at all times as they are the only holder of their medical test results. IDEMIA's solution also complies with the General Data Protection Regulation (GDPR). Our offer supports governments, airlines and airports with their current and future needs.

1. Health Pass Trusted Infrastructure

A central authentication platform creates a secure communication channel between governments and laboratories. Staff within government certified laboratories can log in using multi-factor authentication (PIN, OTP, etc.) and generate an ICAO Visible Digital Seal (VDS) signed by their government. In compliance with data privacy regulations, the central authentication platform does not store health data.

ICAO VDS is an internationally recognized standard of a 2D bar code for sealing health certificates for travel-related purposes. The VDS is signed using a Country Signing Certification Authority (CSCA) Public Key Infrastructure (PKI), which is already used for signing ePassports. A dedicated PKI can also be developed for health purposes. Therefore, the secure exchange of public keys can be done using a Public Key Directory (PKD),simplifying the verification process.



ICAO, along with its 193 member states and key stakeholder international organizations, have a coordinated approach to establish baseline standards in many areas related to civil aviation. It founded the travel document specifications, and currently also gives guidance to developing a global framework with regard to validating health certificates to restart the aviation sector via its Council of Aviation Recovery Task Force (CART).



2. Health Pass for travelers

Governments are the trusted issuing authorities of the health certificate. A cryptographic process ensures the authenticity of the health certificate, and ICAO standards guarantee global interoperability. The traveler may present their certificate in the form of a VDS in one of three ways, via their mobile application, as an electronic pdf that can be printed or a sticker that can be placed on a passport's visa page.

Key points about the Health Pass mobile application:

- IDEMIA provides a stand-alone Health Pass application or a Health Pass SDK to upgrade the existing Mobile ID/COVID apps.
- > The mobile app works like a wallet, allowing multiple health certificates to be stored.
- If a traveler is using the app for the first time, the app guides the traveler through a secure enrollment process using a document for international travel (a passport or ID card).
 Biometric verification may also be completed as part of this process.

3. Health Pass Verification Solution

At the different stages of the passenger journey, prior to or at the airport, the traveler biometrically matches their face against their travel document photo (with their consent) and presents their VDS for verification. Once the VDS is verified, the information contained is checked against the travel document. This verifies the authenticity of the health test result and its allocation to the passenger.

The solution is accessible both online and offline, which is essential for simple and quick verification.

Reinventing the traveler's journey



1. A traveler, Emmy, prepares for a trip. She downloads the Health Travel Pass application followed by secure enrollment using biometrics and her identity document for international travel (passport or ID card). Emmy selects a health test or requests a vaccination. She will then receive a government generated code.



2. Emmy visits a government accredited laboratory and authenticates herself using the code. She will then take a test or vaccine. After connecting to a Health Pass central authentication platform, the laboratory signs the result with an ICAO VDS generated by the government.



3. The laboratory sends this information to Emmy's Health Travel Pass application via a secure channel. Emmy could also receive the Health Travel Pass as an electronic pdf or as a sticker. The certificate can also be printed and given to Emmy directly in the laboratory.



4. At any stage of her journey, Emmy can present her Health Travel Pass as the VDS. Since the VDS is an ICAO interoperable standard, any trusted global operator can verify the test result.



5. The ICAO VDS health certificate guarantees international recognition. IDEMIA's Health Travel Pass enables Emmy to prove her health status, a compliance requirement for her destination country.

Key benefits





Interoperable solution

Based on ICAO standards to ensure worldwide recognition.





Online and offline verification

Traveler health certificates can be verified online and offline at different steps of the traveler's journey.

Wallet approach

Enables safe storage of various health certificates.



Designed for privacy

Compliant with data privacy and protection requirements (GDRP approved). The traveler is the only holder of their medical test results.



Issued by governments

The most trusted authorities to issue the VDS and seal health certificates.



Inclusion

Available in various forms (digital and physical), the Health Pass ensures equal access to everyone.

Why IDEMIA

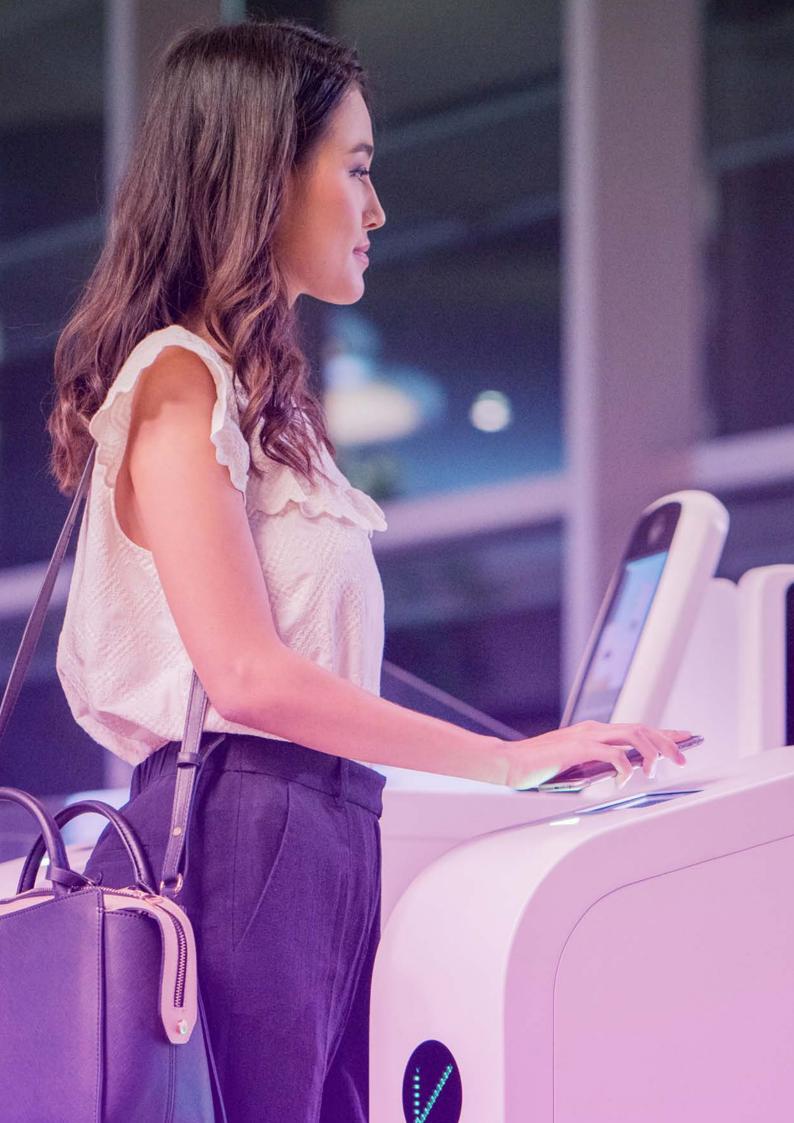
IDEMIA is a global leader in providing secure and trusted environments for everyone. Thanks to our comprehensive expertise in border control, passenger flow facilitation and citizen identity, governments, airports and airlines rely on us to meet their requirements. We have deployed over 30 border control solutions and 130 active identity programs for governments worldwide.

IDEMIA continues to strengthen longstanding relationships with international organizations such as ICAO, IATA, Airport alliances, among others, and participates actively in numerous working groups to support current industry needs.

As chair of the ICAO ICCAIA Aviation Security committee, IDEMIA represents the aviation industry to issue harmonized global standards. This participation enables us to be flexible and adapt to the latest standards and norms. IDEMIA supports governments and the aviation industry in providing secure, trusted and interoperable health certificates.

IDEMIA partners with Orbis Diagnostics

IDEMIA and Orbis Diagnostics, an immunity detection company based in New Zealand, have joined forces to address the issues concerning health checks directly at airports. This solution complements our Health Travel Pass by enabling travelers to perform immunity testing prior to departure at the airport and seal it with an ICAO VDS standard.



Making citizens' lives **safer and easier**

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