Considerations on the use of “health passes” at (European) airports

28 January 2021

Airports Council International – European Region
10 Rue Montoyer, 1000 Brussels, Belgium - tel: +32 (0)2 552 0976 - fax: +32 (0)2 502 5637
e-mail: federico.bonaudi@aci-europe.org - **www.aci-europe.org** - TVA: BE 431.887.748

1. Introduction

The COVID-19 pandemic had a tremendous impact on people's lives and on the economy in general, air transport not being the exception. At European level – and partly due to the fact that public health remains the competency of Member States – different national approaches to travel bans, restrictions, testing, quarantines and vaccination led to unilateral and uncoordinated measures that jeopardise the recovery of the air transport sector.

Fighting COVID-19 while preserving the economy requires a multi-layered outlook. European airports have – amongst other measures - ensured the cleaning & disinfection and the optimisation of heating, ventilation & air conditioning in their premises, enforced the use of masks and physical distancing, provided testing facilities and supported the distribution of vaccines. In spite of all those efforts and the close cooperation with the European institutions and the national authorities, in 2020 European airports lost 1.73 billion passengers, a decline of 70% compared to the previous year and saw their revenues fall by around 60%, a reduction of €30 Billion. ACI EUROPE has revised its 2021 passenger traffic forecast to -56% for the year at Europe's airports in the baseline scenario (down from -43% in the previous forecast). As of January 2021, more than 6,700 air routes have been lost compared to January 2019.

While the European institutions and the Member States consider the different solutions to safely reopen borders, bringing back travel and tourism and all the benefits they entail, passengers look forward to travelling again in safety and confidence. The beginning of mass COVID-19 vaccination is the first step in the path to recovery.

For Member States to lift travel restrictions, passengers may be required to fulfil a series of conditions (for instance a COVID-19 negative test or vaccination if available).

In order to prove compliance with these requirements, passengers need to present a valid certificate. Such certificates currently exist in the form of paper documents, PDF documents, emails or SMS that are not secured and can be easily falsified. A number of frauds have been reported in Europe and the rest of the world. As these documents are not standardised, they are often difficult to interpret and their reading cannot be automated.

There is currently considerable activity in the international arena to define health certificates or passes.

The European Commission estimates that "*it is premature to envisage the use of vaccine certificates for other purposes than health protection*" and that "*an EU approach may facilitate other cross-border applications of such certificates in the future*". The Commission plans to "*continue to work with Member States on vaccination certificates which can be recognised and used in health systems across the EU in full compliance with EU data*

Airports Council International – European Region
10 Rue Montoyer, 1000 Brussels, Belgium - tel: +32 (0)2 552 0976 - fax: +32 (0)2 502 5637
e-mail: federico.bonaudi@aci-europe.org - **www.aci-europe.org** - TVA: BE 431.887.748

protection law – and scaled up globally through the certification systems of the World Health Organisation".[1]

At global level, ICAO is looking at how a mutually recognised testing certificate might be developed based on its expertise on passports and visa documentation, set out in Annex 9 to the Chicago Convention, and WHO has established an expert group to consider the format of a digital / manual vaccination certificate along the lines of a more secure version of the yellow fever certificate which is specified in the International Health Regulations 2005.

For all these reasons, the air transport industry needs a proactive and coordinated approach to elaborate integrated, interoperable, flexible and scalable solutions to adapt to international standards under development. ACI EUROPE took the leadership to coordinate the different health passes initiatives at European and global level and held a series of webinars with the main providers of solutions during November and December of 2020.

The goal of this document is to contribute to the current discussion and present the vision of the airport industry on a number of questions around these tools such as identity, trust end-to-end assurance, document forgery, the multiplication of stakeholders, data privacy and ethics, standards and re-use, interoperability and usability.

2. Scope

A **health pass** constitutes a certificate or credential provided by a certified issuer, proving the holder's health status.

This credential or certificate may be required to perform certain activity (for example travelling or boarding an aircraft) or to grant access to a certain area or zone (for example crossing a border or entering a building).

This certificate **may** include:

- Passenger's health declaration
- The result of a temperature check
- The result of a COVID-19 test (PCR, antigen, antibody or other)
- A COVID-19 vaccination proof (if available)
- Ready-to fly or Not-ready-to-fly status
- Other relevant information (vaccine exemption, immunity etc)
- Validity (depending on the above, for example 48 or 72 hours following a negative PCR test).

[1] Communication to the European Council and the Parliament COM 221/35"A united front to beat COVID-19" of 19 January 2021

Airports Council International – European Region
10 Rue Montoyer, 1000 Brussels, Belgium - tel: +32 (0)2 552 0976 - fax: +32 (0)2 502 5637
e-mail: federico.bonaudi@aci-europe.org - **www.aci-europe.org** - TVA: BE 431.887.748

Such credential should be linked to the holder via an official ID including a series of information, notably:

- Last name
- First name
- Birth date
- Passport or ID number
- Nationality
- Address and contact details

This information should allow the verifier to authenticate the credential and match it with the holder (as it is currently done with electronic passports and boarding passes).

At airports, the checks of health passes may be performed in multiple potential points of testing and checks before and during the passenger journey:

- Before entering the terminal
- At check-in
- At security check
- At border control
- At the boarding gate

The European institutions and the Member States will need to address several questions:

- What are the potential models?
- How does the trust framework functions or engages stakeholders?
- Who 'approves' someone is safe to travel and how is the approval registered?
- Is this a long term requirement, or is the need only for the next 12-18 months?
- How are data privacy challenges managed for health data globally?
- What is the pricing model and who pays?
- Who should be a scheme 'owner' of the end-to-end health travel process versus a provider of technology?
- Will health passes be adaptable to future sanitary requirements?

3. Health pass scheme types

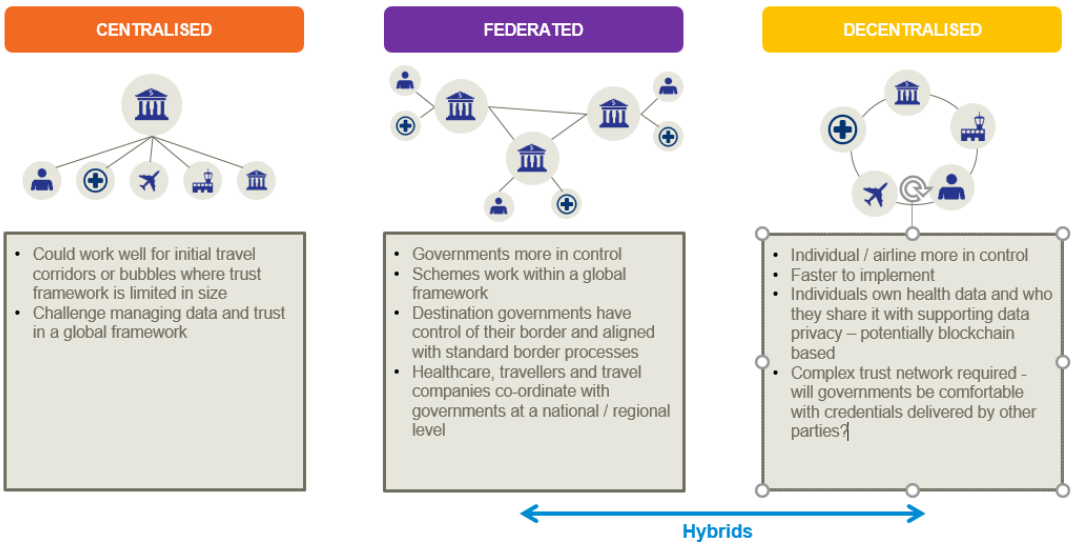
Depending on the issuer, health passes may be centralised, federated or decentralised.

Centralised: A State creates a centralised platform leveraged by all parties and stakeholders. This type could work well at an initial and fast setup, for a single national use or point-to-point between two countries, to create a COVID-19-free "corridor" or "bubble". Its limitations are the lack of scale and integration of the multiple solutions.

Airports Council International – European Region
10 Rue Montoyer, 1000 Brussels, Belgium - tel: +32 (0)2 552 0976 - fax: +32 (0)2 502 5637
e-mail: federico.bonaudi@aci-europe.org - **www.aci-europe.org** - TVA: BE 431.887.748

Federated: States agree on national platform and processes, supported by multi-lateral agreements to define core data-exchange as required by different legislation (for instance GDPR). The platform is leveraged by all national parties and stakeholders following pre-defined procedures in respect of the bilateral agreements.

Decentralised: Model of the different health pass applications, storing health data in the holder's smartphone, potentially leveraging blockchain. The fastest to implement, its limitation being the trust network. The main challenge is the interoperability of the different solutions.



4. Solutions in the market

Since the beginning of the COVID-19 crisis, different providers developed a series of solutions[2]. Due to the number and diversity of the involved stakeholders (international organisations, European institutions, Member States, healthcare providers, laboratories, IT providers, airports, air carriers) several solutions will coexist.

Member States will play a crucial role in defining what solution(s) will be used domestically and for cross-border travel.

For European airports and the air transport industry in general, the main question (although not the only one as we will further develop) is the interoperability of the different solutions, rather than selecting a single one.

[2] For instance and without being exhaustive: IATA Travel Pass, CERTUS, SITA, Common Pass, DIVOK, AOK Pass, Green Pass, IBM, Microsoft, Apple, Idemia, Airsidemobile, Safe Health systems, The Mayo Clinic.

Airports Council International – European Region
10 Rue Montoyer, 1000 Brussels, Belgium - tel: +32 (0)2 552 0976 - fax: +32 (0)2 502 5637
e-mail: federico.bonaudi@aci-europe.org - **www.aci-europe.org** - TVA: BE 431.887.748

The different solutions currently available in the market provide notably:

- A list of health/sanitary requirements for travelling
- A list of trusted issuers (accredited providers of testing and/or or vaccination).
- A health pass (this may have different denominations)
- An engine that determines if the holder is eligible or not for travel (ready-to-fly or similar), providing their health status and the applicable rules at departure and/or destination
- A Wallet App (or equivalent) to store and manage the above.

It should be noted that some of the projects are being prepared as health solutions which may be used for travel, whereas some are essentially travel solutions that could be used elsewhere. A distinction may also be drawn between those projects which focus on testing, those on vaccination, and those on both.

5. Infrastructure and staff needs for the deployment of health passes tools at airports

Airport managing bodies, together with the different stakeholders need to define the processes and select the touchpoints where checks and verifications will be made. Due to the different formats of health passes, it will be necessary to deploy the means to read them (manually or automatically) or adopt standarisation (for instance ICAO standards)

This may be done through:

- Dedicated devices (e.g. smartphones, QR code readers connected to computers) or
- Integration into the existing systems (such as boarding pass or border control readers).

For most solutions, an internet/Wifi connection may be needed, however, they should also allow off-line work, in case of internet, server or electricity outage. No additional specific infrastructure should be needed.

In terms of staff – depending on the decision of the Member State – staff at check-in, security or border control and/or boarding may need to perform additional checks.

6. The way forward: requirements for the use of health passes at European airports

Should the European institutions and the Member States decide to require a health pass for passengers to travel, European airports consider that they should meet the following requirements:

- **Availability**. The use of existing industry platforms will minimise complexity and costs, maximise investments and enable a safe and seamless journey.

Airports Council International – European Region
10 Rue Montoyer, 1000 Brussels, Belgium - tel: +32 (0)2 552 0976 - fax: +32 (0)2 502 5637
e-mail: federico.bonaudi@aci-europe.org - **www.aci-europe.org** - TVA: BE 431.887.748

- **Accessibility.** Some travelers are not equipped with digitally-enabled devices and they should not be left aside. Thus, it should be possible to deliver a paper health pass, or to allow passengers to print it. Similarly to boarding passes, health passes should be available in multiple formats (PDF, email, SMS or printed on paper).
- **Speed**. The verifier should be able to quickly check the authenticity of a health pass. This means that health passes must be machine readable (e.g. with a barcode scanner device) and its checking should be available in the device used for the verification (or the computer linked to it).
- **Automation**. In addition to the verification of the integrity of the health pass, the verification process should also automatically and seamlessly check that the issuer is legitime and accredited.
- **Trustworthiness**. It should be secured and be able to detect counterfeits.
- **Interoperability**. As each Member State or Third country may decide on a given solution, it is essential to guarantee the verification of different formats and issuers.
- **Verifiability**. This should be possible to be done off-line, in case the computer systems or the internet are down for some period of time. The off-line verification is important in order not to stop or delay the verification process in case of connection problems.
- **Compliance with GDPR**. Health passes need to comply with ALL the GDPR requirements and those of third countries[3]. Checks must be done without the need to access the issuer's database or the holder's health file. This means that the Issuance and the Verification processes must be totally independent. This is a very important aspect for security and privacy reasons.
- **Decentralisation**. The emission and the verification should be done in a fully decentralised way, without the need for interconnections between the different stakeholders.
- **Scalability**. The scalability of the different solutions will need to be carefully assessed due to the big number of certificates to be issued and verified.
- **Recognition.** Ideally, health passes should be globally accepted and recognised.

****

[3] GDPR is a gold standard for privacy. But on the subject of health information, US Health Insurance Portability and Accountability Act of 1996 (HIPAA) is actually a higher standard.

Airports Council International – European Region
10 Rue Montoyer, 1000 Brussels, Belgium - tel: +32 (0)2 552 0976 - fax: +32 (0)2 502 5637
e-mail: federico.bonaudi@aci-europe.org - **www.aci-europe.org** - TVA: BE 431.887.748