Why governments and the aviation industry have to prepare together for the next golden age of air travel.

Annet Steenbergen, chair of IATA's Passenger Facilitation Working Group discusses the role of biometrics in the end to end passenger process, specifically in relation to a successful single token concept running at Aruba Airport.

The use of biometrics has started an advance in passenger facilitation that has become irreversible. From automated border control to self service boarding, more and more airports are incorporating biometrics into passenger facilitation as the tool to reduce throughput times, improve efficiency and security. Airports, airlines and governments are facing similar challenges to prepare for the predicted doubling in air travel over the next 15-20 years; cost and infrastructural restraints on the one hand and demand for better services and higher security on the other.

Several innovative airport projects are currently being under taken to reduce repetitive identity checks and create a seamless flow through the reuse of a biometric token.
These projects may differ in the number of passenger facilitation steps incorporated, but all share the use of a single token established after one enrollment and identity check of the passenger and the reuse of that token through biometric identification.

This single token or 'One Identity' is going to be the key for creating a true end-to-end passenger facilitation process for all stakeholders at an airport. However, to make this token future proof and ready for global participation it will need to have a foundation in a trusted and secure standard. If we look at the definition of the end-to-end process of passenger facilitation, we quickly realize that with the available technology in biometrics from mobile enrollment to capture of biometrics on the go, we have to prepare for an end-to-end solution that will be an ever-evolving concept. One of the important realizations of this is the concept is that in the future we can use single tokens *on* airports but also *between* airports.

What is a single token?
The single token concept means that a passenger's identity is verified and authenticated by matching their passport and their biometrics only once throughout a travel journey. This can for example be done via a trusted and secure app on their smart phone or at an airport kiosk. A single token is then established within a secure platform and the passenger's identity can be verified in the following steps at the airport via biometrics.

For example at Aruba Airport where the Happy Flow single token system has been in place for a year now, a passenger enrolls in the Happy Flow single token process at the check-in kiosk. The passport is authenticated and the biometrics of the passenger (face) are matched to the biometrics in the ePassport. A picture of the passenger is then captured and stored in a personal data envelop that virtually travels with the passenger on journey through their airport

and is used to identify the passenger. This means that after check in/enrollment the passenger can store his passport and use only their face to identify themselves at bag drop, access check/immigration (merged into one) and boarding. The platform that facilitates the passenger data envelop is developed according to the 'privacy by design' principle. This means that the stakeholder using the system will only be able to retrieve from the system the information regarding the passenger that they are allowed to see and need to see for their operation.

The use of the system in Aruba has so far shown that throughput times have improved, all stakeholders enjoy more efficiency, passengers are happy and, very important, a fast and reliable id-check has been established. It must be mentioned that this is only possible because the government, the airport and the airline have decided to work together. This public private cooperation is key to the success of Happy Flow. It is the government that is responsible for the verification and authentication of the identity that forms the single token and the airport and airline reuse that by matching the biometrics of the passenger at the various steps of the passenger facilitation.

Preparing for the future (which is near)

Aruba airport is not the only initiative that uses a single for several steps of the facilitation process. Changi and Schiphol are preparing or already deploying pilots with the use of a single token. As stated before the use of biometrics for passenger facilitation is an irreversible process and needs standardization on an intergovernmental level to assure the use of secure and trustworthy biometric token. After all, governments remain the primary reliable source to establish an identity.

As security is an issue that must be dealt with without any compromises and is as important to governments as it is to the aviation industry, the use of a single token will become crucial to facilitate growth. ICAO's Machine Readable Travel Document program (MRTD) has been instrumental in promoting the partnership of security and facilitation, and should consider the single token as a next step in their program to promote future global participation.

Governments and the aviation industry will have to work together; it is the only way to facilitate the next golden age of travel. A globally standard single token will strike the balance between the industry's aim for faster and more personalized air travel and the government's responsibility to secure borders and spend the tax payer's money wisely.

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