

Digital Travel Credentials

The digitization of the passport



Digital travel documents are paving the way to a future where the traditional use of passports will change. The main disadvantage of the current border control is that the electronic passport has to be read out at the border control, which is time-consuming and leads to longer queues. This is why the International Civil Aviation Organization (ICAO) has defined DTC.

Digital Travel Credentials (DTC) are the secure digitization of passports to speed up the travel experience, in particular the verification of travelers' identities. While the concept foresees three different levels of digitization, only so-called "Type 1" is currently applicable. The process is based on the electronic passport, the ICAO eMRTD. It will contain the holder's facial image, personal data and security features to support authentication. The DTC is derived from the eMRTD.

The benefits of DTC include the possibility for pre-checks (passport is checked and validated before arrival), reduced queues at border control and a better travel experience. The DTC enables smooth and fast border crossings without compromising security. This saves time for everyone involved, including travelers, airports and border control authorities.

Three steps to a DTC

1. Travelers will be able to create their own DTC using their smartphone prior to traveling. Possibly also with biometric verification against the passport using a selfie. In the future, this may also be linked to flight data.
2. The DTC is then sent to the central system of the destination's border authority. Passport data will be pre-checked (e.g. search query with direct link to police search systems) before the traveler arrives at the border control.
3. At the airport, the DTC is then retrieved from the central system using facial biometrics, for example. Once the data has been successfully loaded, there is no need to read out the physical passport at border control anymore. The passport is only needed briefly for the verification of the DTC.

secunet's DTC approach

The architecture for the DTC process consists of a mobile component, e.g. smartphones, a central component, e.g. a central management and verification system, and a border control component, e.g. an eGate/ABC, a kiosk or even a border control application.

secunet offers a wide product portfolio:

- secunet biomiddle mobile, providing document reading and biometric acquisition and verification functionality as a simple SDK for integration into third-party apps
- secunet easyserver and bioserver as a central management and verification system
- Various border control components: the automated border control system secunet easygate, the self-service system secunet easykiosk as well as secunet bocoa in use at border control counters