

Session 6

Digital by Default ***The Rise of Digital Travel Credentials (DTCs)***

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What is a DTC

- At a simplistic level, a DTC has two purposes
 - Passport data in an interoperable format, generally for advance submission – DTC-VC
 - Additional form factors apart from the passport booklet – DTC-PC
- Cryptographic binding that ties it back to the issuer of the document and provides an unbroken chain of validation
- Three types
 - Passport booklet + DTC-VC
 - Passport booklet + DTC-VC + DTC-PC
 - DTC-VC + DTC-PC

What is not a DTC

- Data “derived” from passport or DTC-VC, but broken up for presentation
- For example:
 - DG1 contains the MRZ, which has name and DOB
 - If presented as DG1, which can be verified using the EF.SOD, then it is still a DTC
 - If the Name and/or DOB is presented separately, it cannot be verified using the EF.SOD and hence, is not a DTC

Where are we at?

- DTC Virtual Component (VC) was specified and approved in 2020
- A specification for the Physical Component (PC) that closely reflects the current interface to Inspection systems was specified and approved in 2022
- Current effort is to define other form factors (e.g. Mobile phone)

Why no Type-2 with mobile form factor?

- The PC is used for clone detection – High security required for the storage of private key
- Needs to have some specifications to evaluate the security of the devices and third party certification
- Mobile device may be used as a Man in the middle – The data may not come from the device being presented at the Inspection System

What are we doing to address this?

- SC17/WG3 has a collaboration with SC17/WG4 to establish parameters of security for mobile devices
- Ensuring that the protocol defined between Inspection System and Mobile device is secure and will not have Man in the middle presentations
- Impact:
ICAO has not created specifications for mobile devices yet. Please remember that in interactions with vendors

What are we working on at the moment?

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- In recent years, DTC has been tested in real-world travel environments, and plans are underway to implement DTC around the world
- Information gathered from the pilots has made it clear that the use of DTC, especially for border crossings, is only possible on a large scale, if a protocol for DTC transmission is also standardized.
- This refers in particular to situations where, before traveling, a passenger sends a DTC from their device to the authorities of the country where the border crossing takes place.

Thank You

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