ICAO

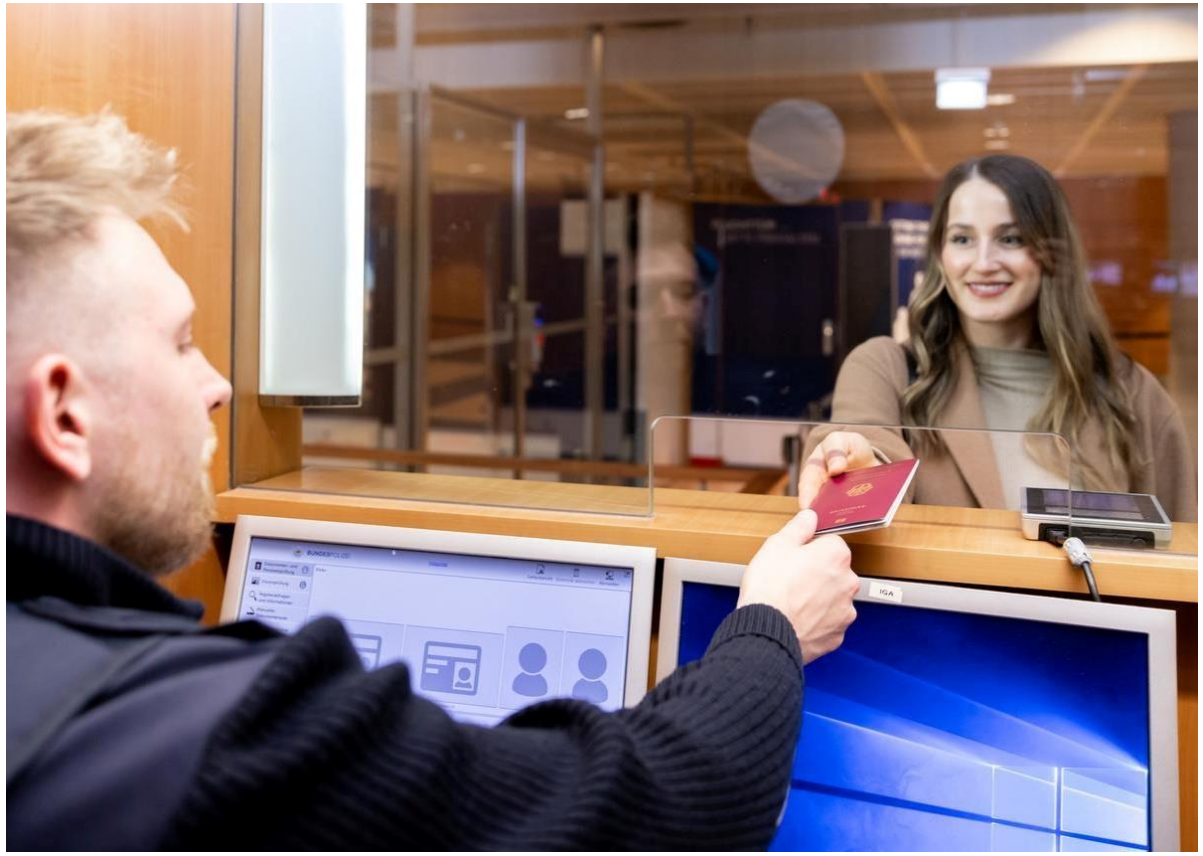
2025 ICAO TRIP SYMPOSIUM

MONTRÉAL , CANADA | NOVEMBER 4 - 6

Patrick Beer

Senior advisor
Federal office of police - Switzerland

Copyright: Hamburg Airport



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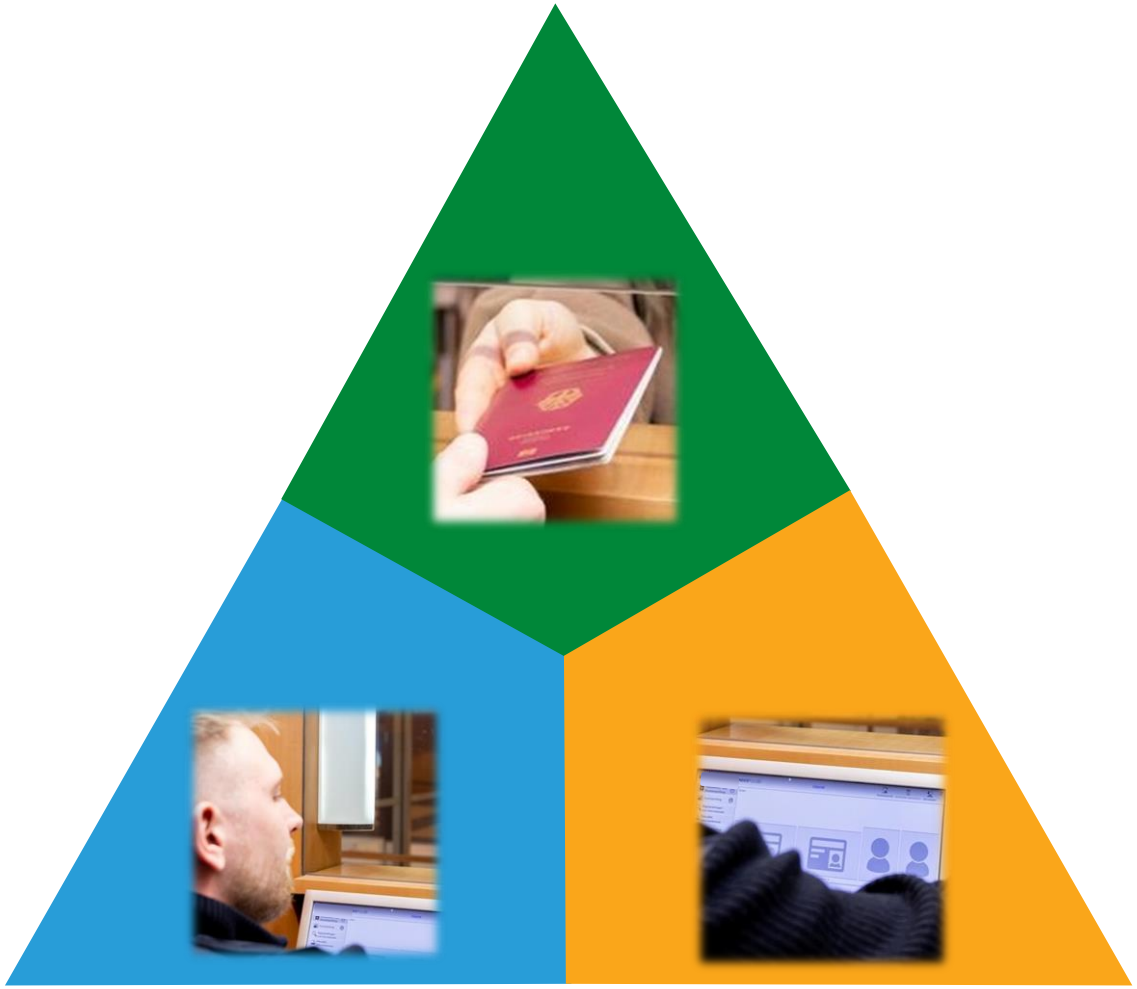
Fully compliant ePassport



Well trained border officer

Well thought, fully functional system

Fully compliant ePassport

beyond the physical booklet

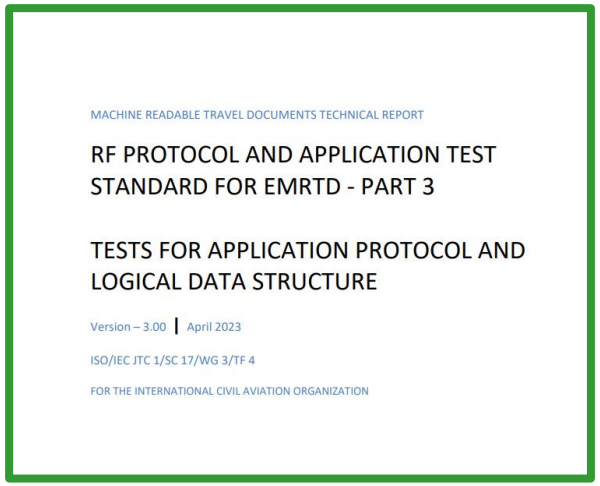
Part 10 : which data are mandatory and which are optional, how shall we store them

Part 11: how do we need to protect the data, how can we access the data

Part 12: what rules do we need to follow to make sure our citizen's passport can be verified, what helps us know the data are authentic and unchanged

Fully compliant ePassport

how to tell ?


MACHINE READABLE TRAVEL DOCUMENTS TECHNICAL REPORT

RF PROTOCOL AND APPLICATION TEST STANDARD FOR EMRTD - PART 3

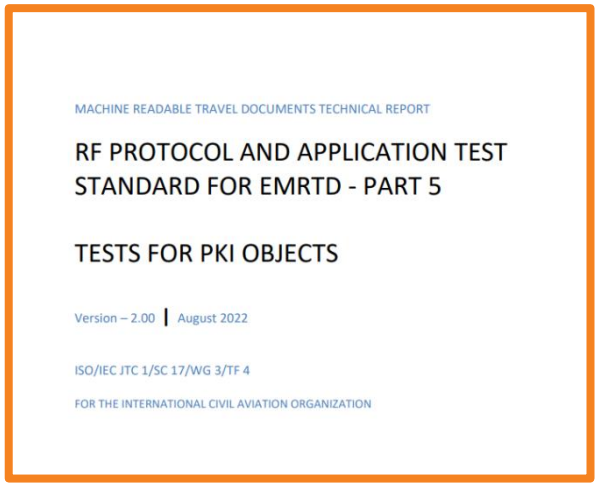
TESTS FOR APPLICATION PROTOCOL AND LOGICAL DATA STRUCTURE

Version – 3.00 | April 2023

ISO/IEC JTC 1/SC 17/WG 3/TF 4

FOR THE INTERNATIONAL CIVIL AVIATION ORGANIZATION

Part 3 of the test tell if the data are compliant with Doc9303 part 10 and 11


MACHINE READABLE TRAVEL DOCUMENTS TECHNICAL REPORT

RF PROTOCOL AND APPLICATION TEST STANDARD FOR EMRTD - PART 5

TESTS FOR PKI OBJECTS

Version – 2.00 | August 2022

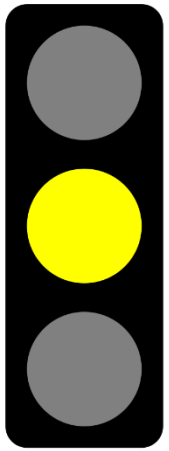
ISO/IEC JTC 1/SC 17/WG 3/TF 4

FOR THE INTERNATIONAL CIVIL AVIATION ORGANIZATION

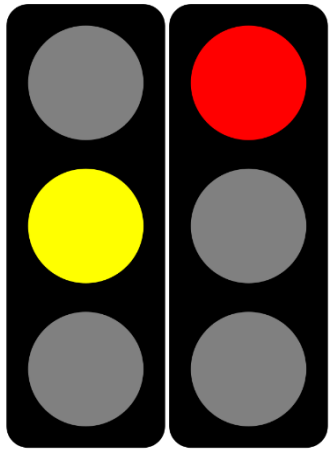
Part 5 of the test tell if the so called PKI objects are compliant with Doc9303 part 12

Fully compliant ePassport

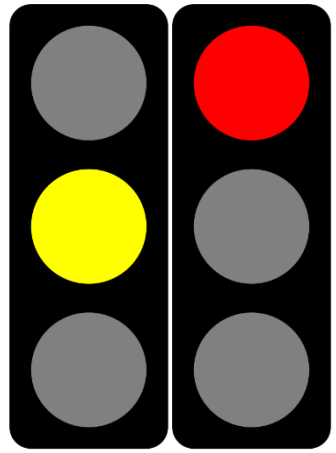
what happens if it is not?



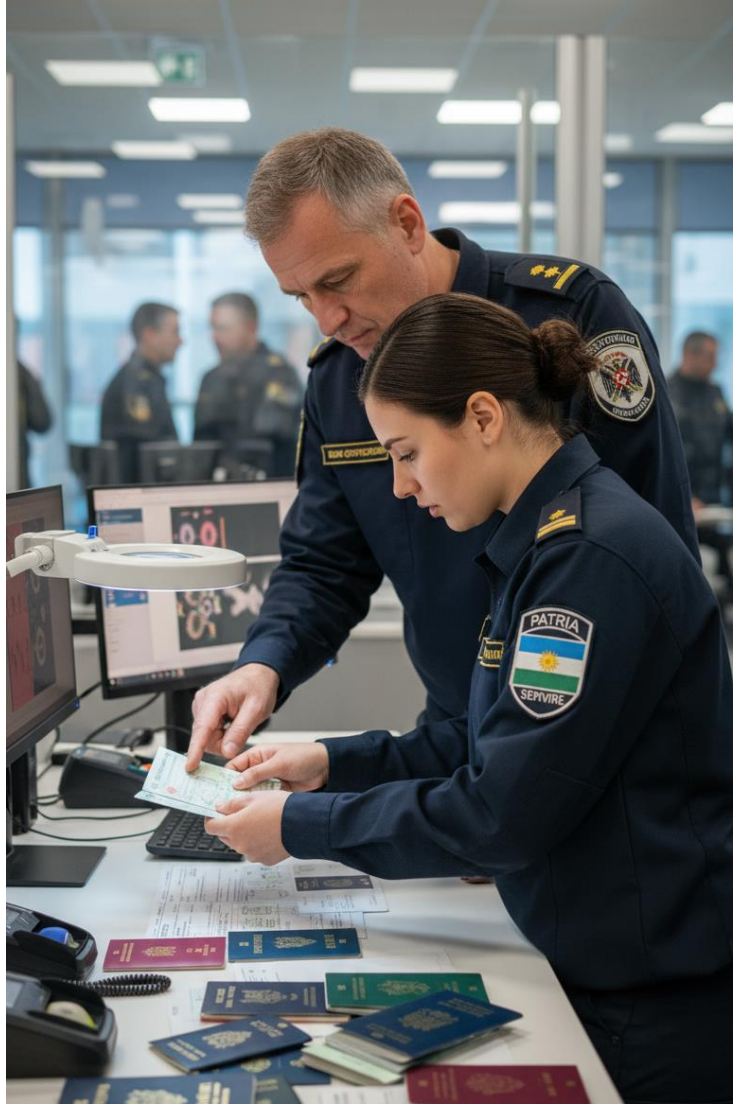
If the data are not encoded correctly, they might not be displayed correctly and raise suspicion.



If the security mechanisms are not implemented correctly, the data could not be accessed and raise suspicion or even suggest the chip is not genuine.



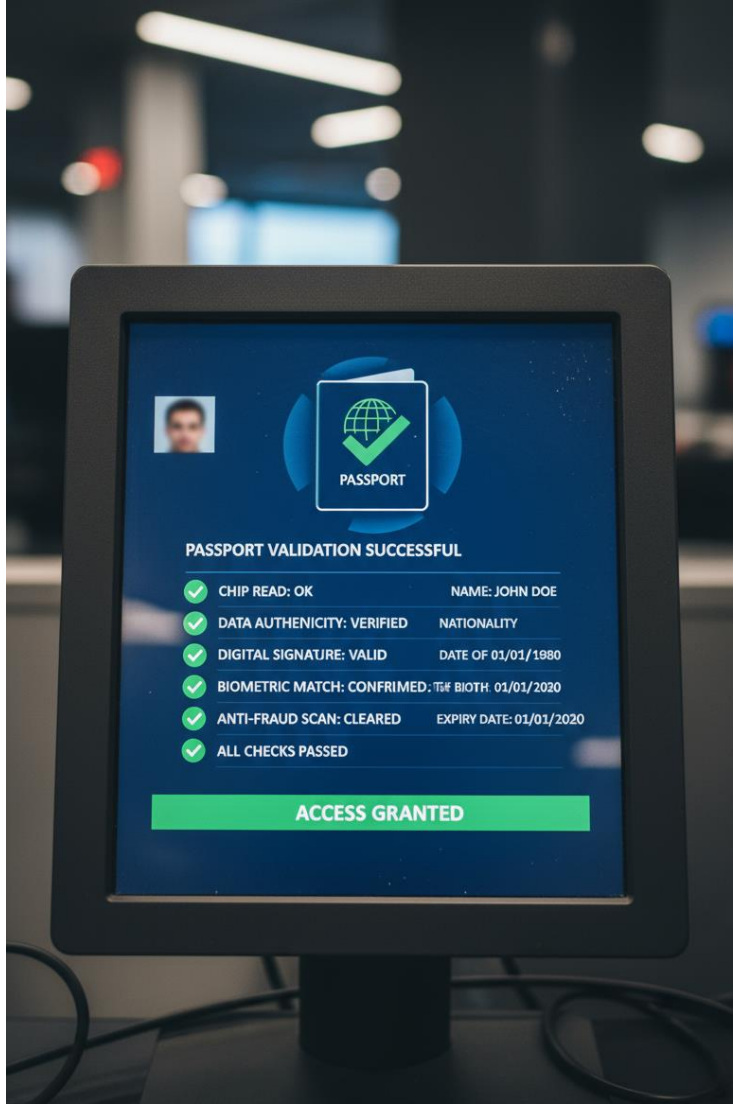
If the PKI requirements are not implemented correctly, the ePassport validation can fail and suggest the data have been tampered with



Well trained border officer

how much time ?

- border guards training is still mainly focused on the physical document
- border guards are very well trained on detecting fraudulent documents and malicious travellers
- the electronic side does need a deeper technical understanding
- how much time is enough?

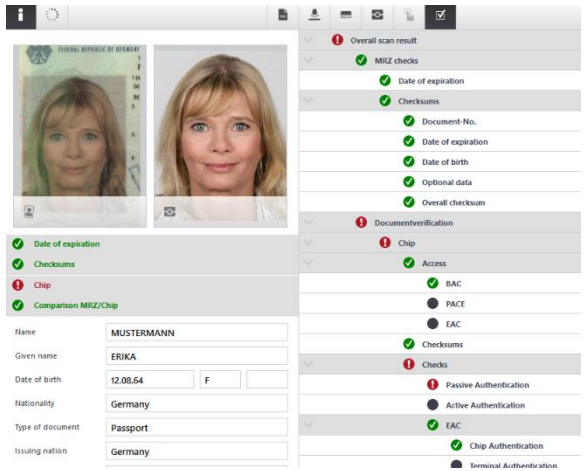


Well though functional systems

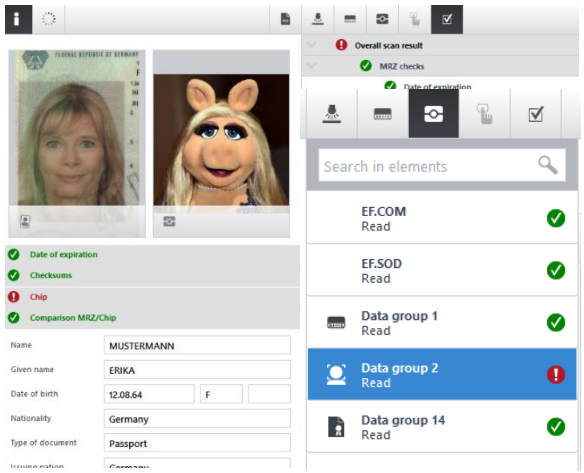
- border guard passport checking software are complex
- need to adjust to many requirements and display many information
- very good at displaying search results
- but are they really good at helping the border guards?

Well though functional systems

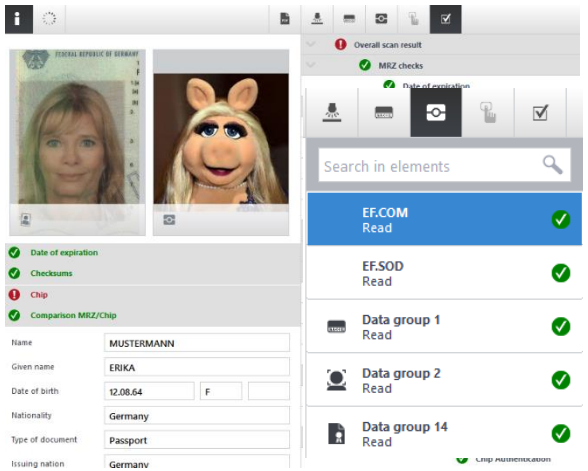
What do they tell us?



This document was completely correct, the CSCA was just missing from the system



For this document, the picture of the passenger in the chip has been changed



For this document, the picture of the passenger has been changed, the security file adjusted and the data signed by the forger.

Well though functional systems

Are you ready for 39794-5

ICAO TRIP 2025

until 01.01.2026

All passport readers must be able to display biometric data encoded according to the new 39794-5 standard

08.2023

MACHINE READABLE TRAVEL DOCUMENTS TECHNICAL REPORT

ISO/IEC 39794-5 Application Profile for eMRTDs

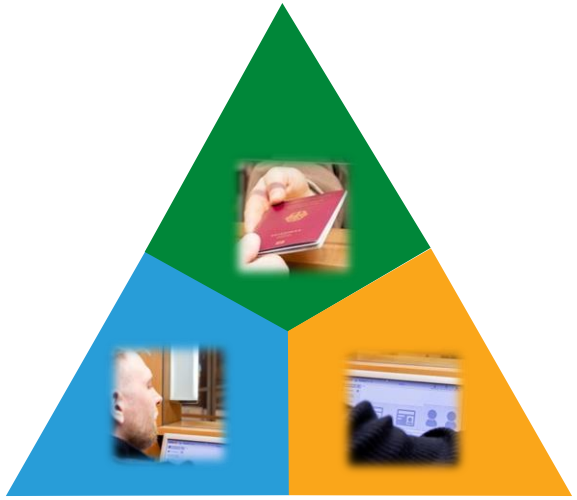
Version – 1.00 | August 2023

01.01.2030 at the latest

All passport newly issued must use the 39794-5 biometric encoding for facial images

Take-aways

- passport agencies : compliant e-passports;
- border guard agencies : train people on the technical side as well as on the physical side;
- vendors : turnkey solution are easy, but are they really right?



Border guard agencies

Strengthen training on the e-passport

Build staff technical skills

Contractors / vendors

Adjust your products to the needs of your customers

Sometimes less is more !

Passport issuing agencies

Make sure only compliant e-passport are issued

Check compliancy with each technical change

Thank You

ICAO