Regional Seminar on MRTDs and Traveller Identification Management
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ICAO MRTD and eMRTD Standards and Specification

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Introduction

- Historical overview
- Doc 9303
  - Current Structure
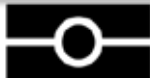 - Future Structure
- ePassport

Historical Overview

- Standardization in the early 1980s

- Goal: Global Interoperability

- Consists of 3 Parts

  – Passports, Visas, Identity cards

- Technical Reports, Supplements
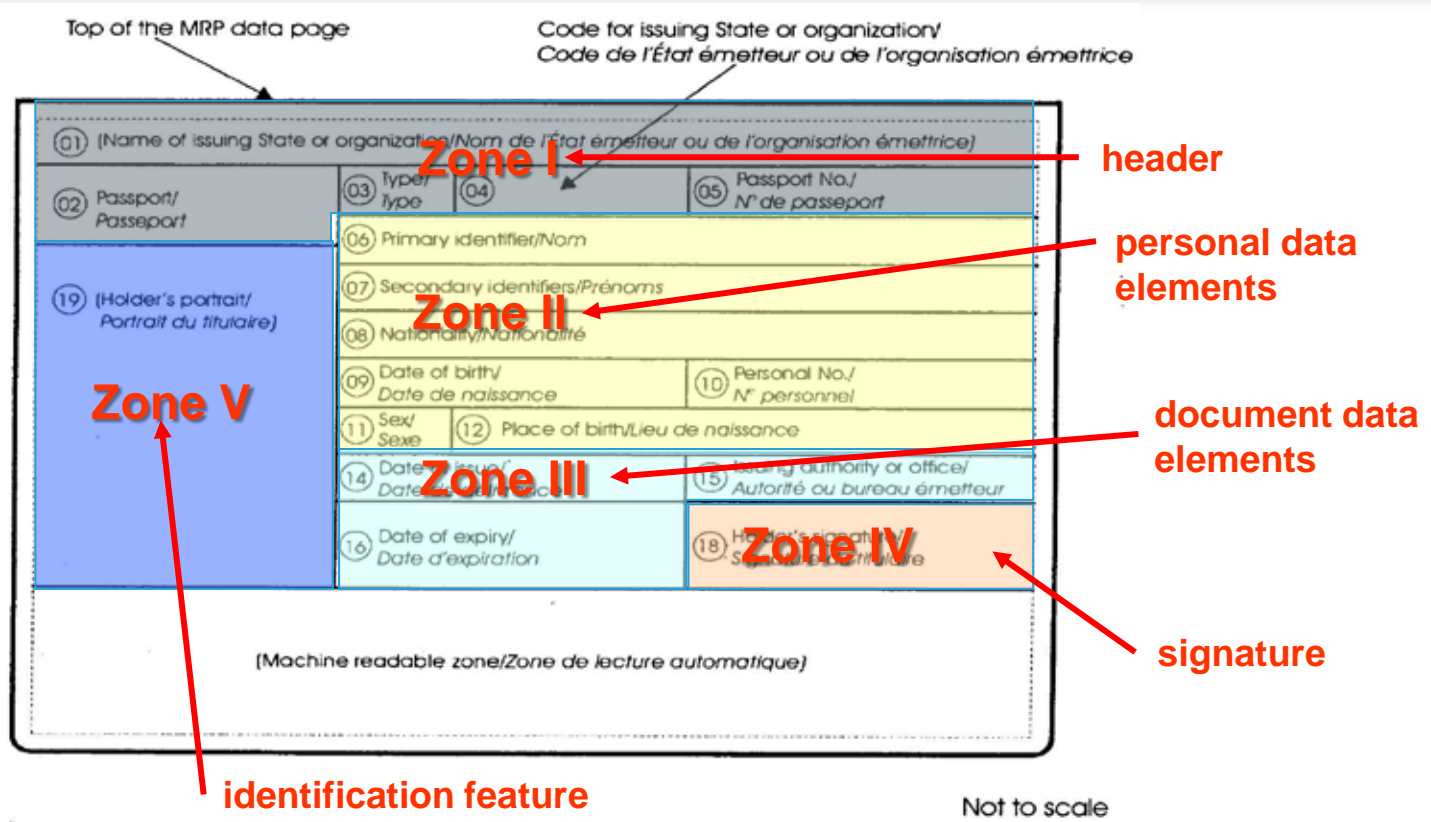
Doc 9303

- Part 1, Volume 1
- Passport Specification
  - Security Provisions
  - Visual Inspection Zone
  - Machine-Readable Zone

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country code

document type

primary & secondary identifiers (names)

filler characters

P<CANMARTIN<<SARAH<<<<<<<<<<<<<<<<<<<<<<<<<<<

ZE000509<9CAN8501019F2301147<<<<<<<<<<<<<<08

passport number

nationality

sex

optional data

check digits

date of birth

date of expiry

ePassport

- Part 1, Volume 2
- ePassport Specification
  - is at the discretion of the issuing state
- Biometric identification:
  - Facial recognition (mandatory)
  - Fingerprint (optional) or Iris scan (optional)
- Data to include: facial image, MRZ data plus any relevant info at the discretion of the State

ePassport Security

- Data in a chip is meant to be scanned and read
- Basic Access Control
  - Ensures information on the chip cannot be skimmed
- Public Key Infrastructure
  - Ensures information on the chip has not been altered
- PKI is implemented through the Public Key Directory (PKD) developed and provided by ICAO
- PKD:
- **PKD must be an integral part of every eMRP**

Part 2 - Visas

- Format A Visa (MRV-A) fits in ID-3 travel document
  - Most common format, standard within the EU
- Format B Visa (MRV-B) is an ID-2 size

Part 3, Volume 1: ID Cards

- Two formats:
  - TD1 (ID1-sized card)
  - TD2 (ID2-sized card)

Part 3, Volume 2: eID Cards

- Identical approach to eMRTDs
  - Embedded contactless chip
- Must comply with Part 1, Volume 2 (ePassports)

Future Doc 9303

- Complete review is well advanced
- Reformatted into several volumes
- Easier to use
- Up to date

http://www.icao.int/Security/mrtd/Pages/default.aspx

ePassport

- Do I want an ePassport system?
- Do I need an ePassport system?
- Am I prepared to USE an ePassport system?
- Is the integrity of my current process consistent with and complementary to the technological advances of an ePassport program?
- "Make everything as simple as possible, but not simpler." – Albert Einstein

Do You Want an ePassport System?

- Have you done a comprehensive risk identification and management analysis of your present system?

- Are you confident that your vulnerabilities will be identified and corrected to take advantage of the ePassport?

- Why is an ePassport useful to your country?

Do You Need an ePassport System?

- What will the "e" do that a traditional MRP will not?
- Are you prepared to take advantage of the extensive economies of scale (centralization) often accompanying ePassport implementation?
- Have you considered the impact on overseas issuance?
- Is your border management procedure and process equipped to deal with inspecting ePassports?

Are You Prepared to USE an ePassport System*?*

- Are your inspection processes ready to use the cryptographic keys in ePassport?
- Are you going to join the PKD prior to ePassport implementation; have you taken appropriate budgeting precautions?
- Have you prepared your traveling public for the changes that biometric capture and use will bring about?

Overall System Integrity: Is Yours Enough?

- Is the integrity of the current issuance and handling process consistent with and complementary to the technological advances of an ePassport program?
- Are evidence of identity procedures and safeguards as strong as the document that you issue that alleges identity?
- Have you effected changes to insure to respect personal privacy of biometric and other data?
- Have your human resource issues been thoroughly addressed?
- Do you comply with both the letter as well as the *spirit* of 9303?
- Have you examined overseas issuance considering inherent differences of culture, infrastructure, external pressures?

Measures of Integrity

- Human systems-zero tolerance
- Work atmosphere and environment
- Evidence of identification
- Spoiled document handling
- Blank document controls
- In-house auditing
- Penalties-legal/judicial system as well as administrative

Application and Entitlement Processes: Evidence of Identification

- ***Evidence** that the claimed identity is valid,* i.e. that the person was in fact born and, if so, that the owner of that identity is still alive.
- ***Evidence** that the presenter links to the claimed identity* – i.e. that the person claiming the identity is who they say they are and that they are the only claimant of the identity.
- ***Evidence** that the presenter uses the claimed identity* – i.e. that the claimant is operating under this identity within the community; ***Social Footprint***
- Standards of performance and indices of variances-expectations and a framework so employees know the rules
- Breeder documents
- Online database linkages of a wide nature with real time access; civil registries, systems of birth, death, marriage, tax, real estate, and related commercial services

Thank You!

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