INTERNATIONAL CIVIL AVIATION ORGANIZATION

ICAO Regional Seminar on MRTDs, Biometrics and Border Security

30 November - 2 December 2011
Singapore

ICAO MRTD STANDARDS & SPECIFICATIONS

David Philp

General Manager, New Zealand Passports

Chair, ICAO ICBWG

Agenda

- Role of ICAO
- Chicago Convention 1944
- Doc 9303
  - Part 1 MRPs
  - Part 2 Visas
  - Part 3 Travel cards

International standards

Evolution of MRTD

- Annex 9 to the Chicago convention of 1944
- 1968 - ICAO started work on MRTD standards.
- 1980 – First edition of Doc 9303
- First MRP issued in 1981
- Standards evolved over nearly 3 decades
- Balance between facilitation and security
- Cultural considerations:
  - Transliteration
  - Flexibility in VIZ
- First introduction of ePassport 2004

Chapter 3. of Annex 9

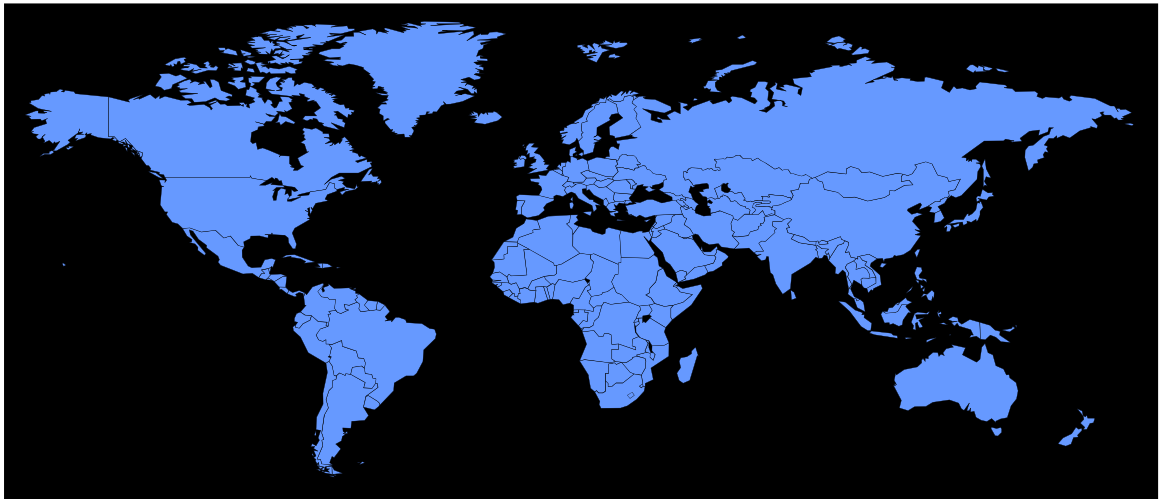
- **Contracting States:**
  - **Shall not extend the validity of their MRTDs**
  - **Shall issue a separate passport to each person, regardless of age**
  - **Validity. At least 5 years. Not more than 10 yrs**
  - **Shall begin issuing only MRPs no later than 1 April 2010**
  - **Shall make provision for encoded data to be revealed to the holder of the document**
  - **Non MR passports issued after 24 Nov 2005 shall ensure that the expiration date falls before 24 Nov 2015. After 2015 all passports in circulation must be MRP**
  - **NOTE: UN Conventions (1951 Refugee and 1954 Stateless Persons) state that fees for CTDs should not exceed the lowest scale of charges for national passports**

ICAO standards

- ICAO DOCUMENT 9303 (Parts 1-3), Family of MRTDs:
  - Part 1: Machine Readable Passports (MRPs)
    - **Volumes 1 & 2**
  - Part 2: Machine Readable Visas (MRVs)
  - Part 3: Official Travel Documents (cards)
    - Volumes 1 & 2
- SUPPLEMENT (10)

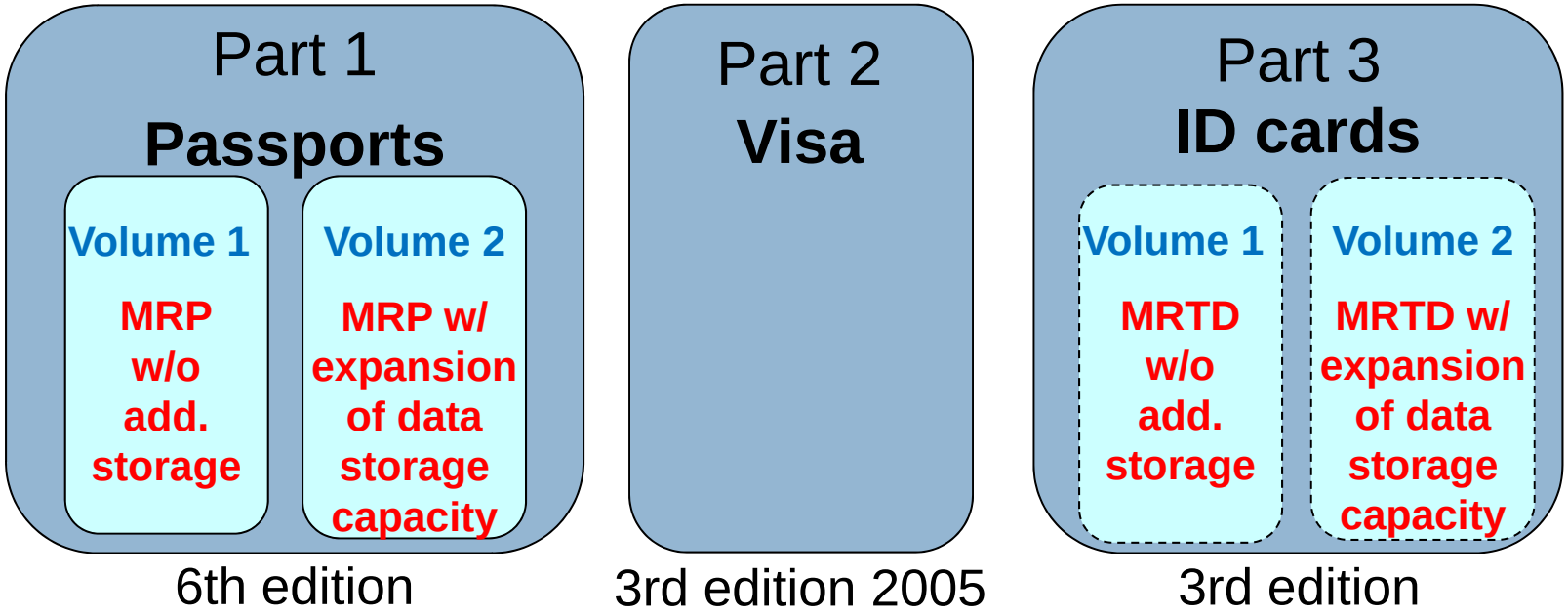
Intended benefits of MRTDs

- To facilitate and secure passenger processing at border control points
- To enable global interoperability



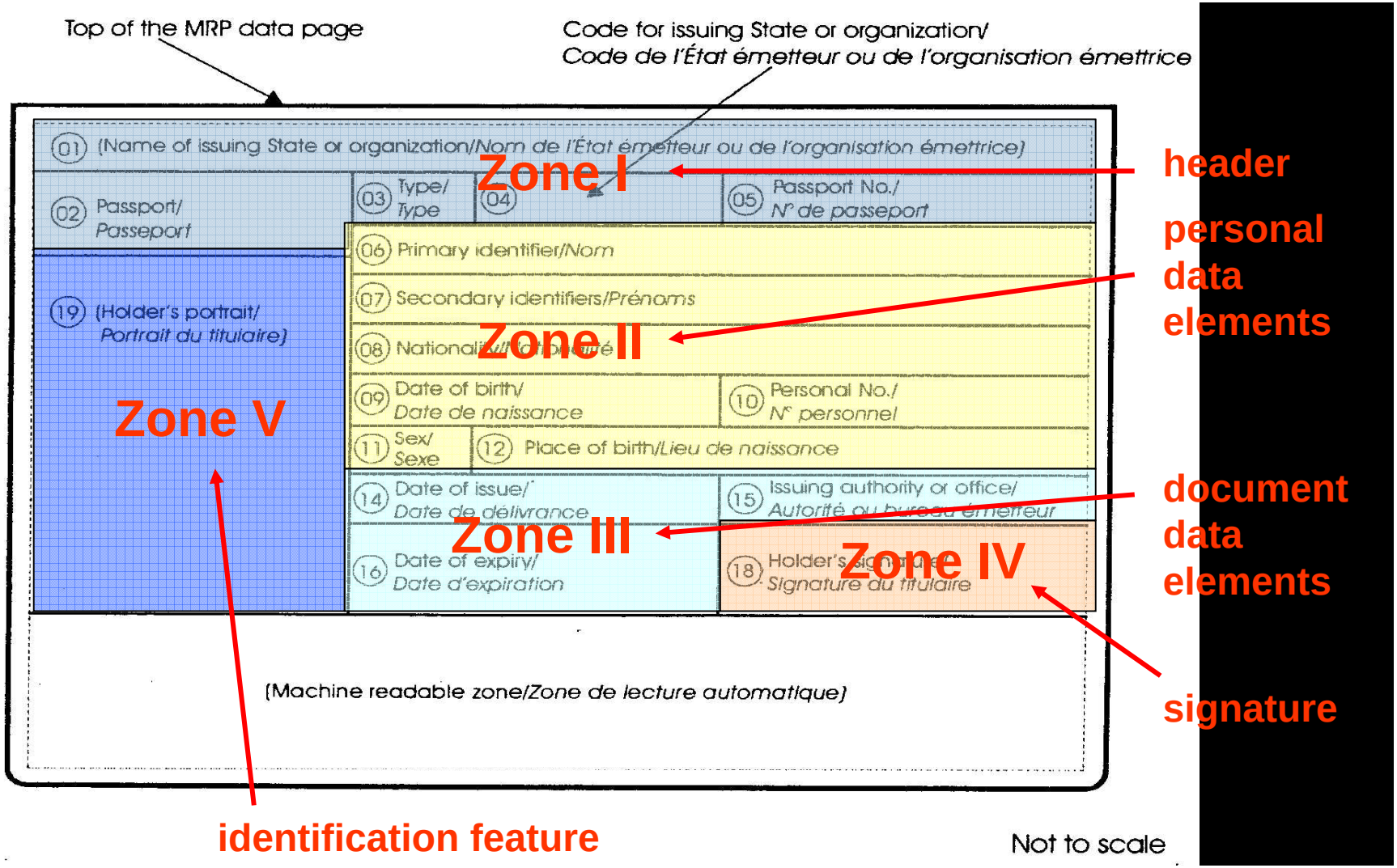
ICAO Document 9303 – status

- Structure of Document 9303
- Supplements (10)
- Under review – TAG/MRTD 20: WP 8

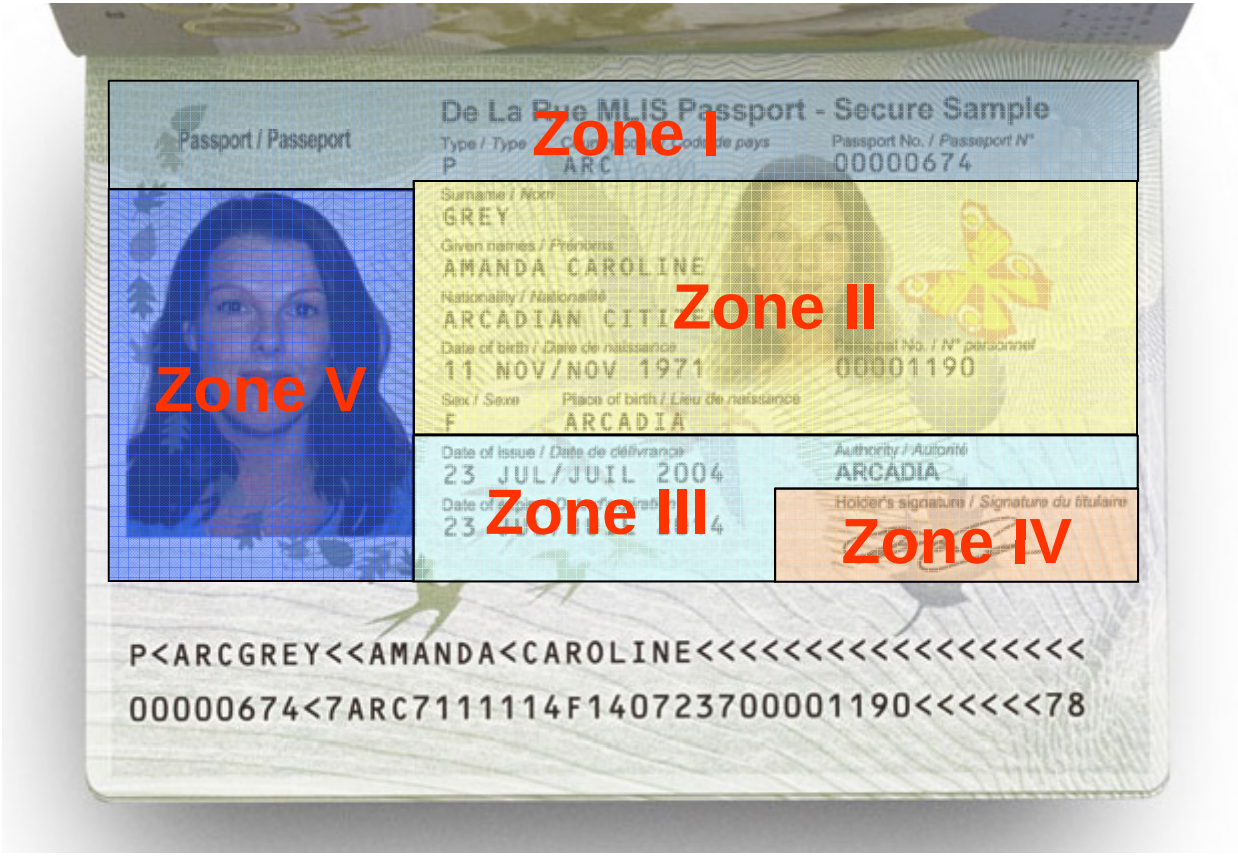


Data page layout

Visual inspection zone (VIZ)



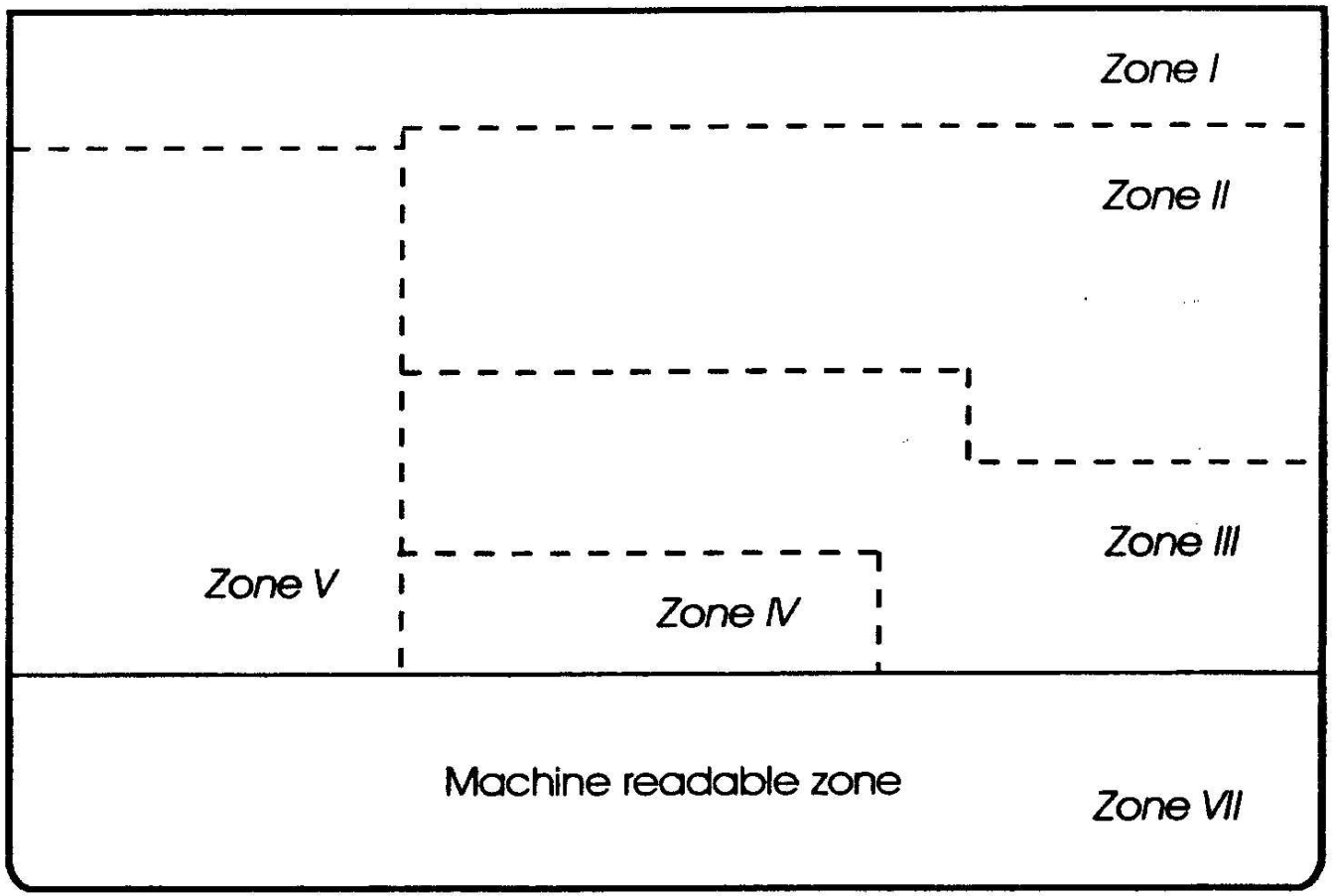
Visual inspection zone (VIZ)



VIZ – zone location options

Diagram 2. Flexible positioning of Zones 1 to V

Example 1



VIZ – zone location options

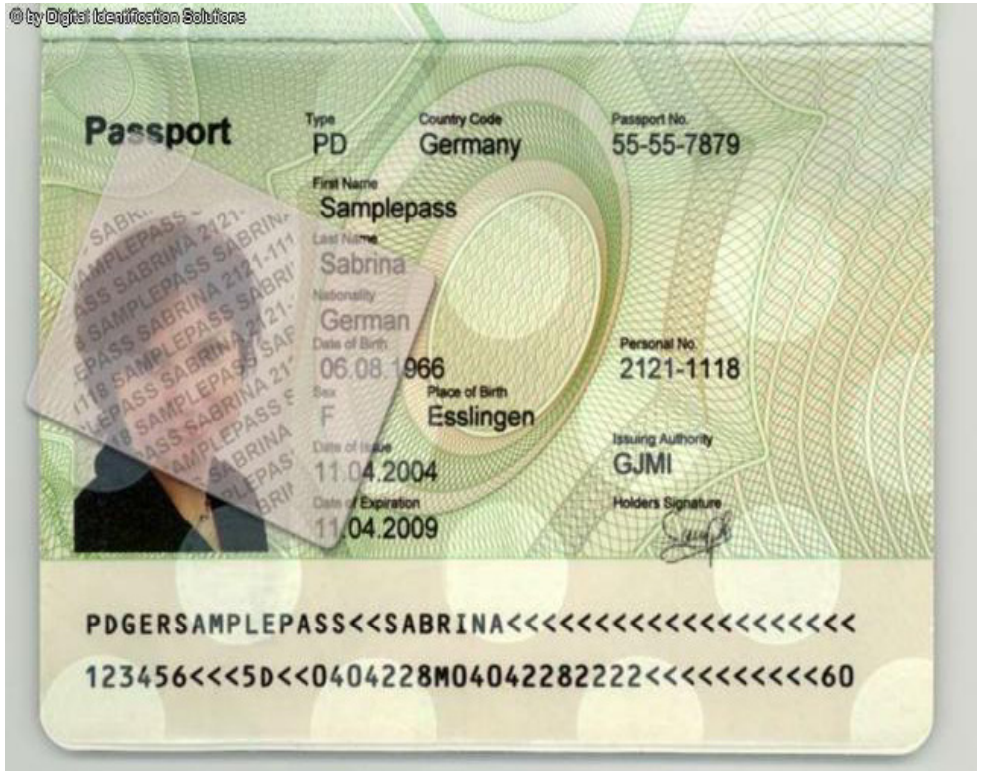
Field 13 – optional personal data elements (ghost image, fingerprint, etc) (VR)

VIZ – zone location options

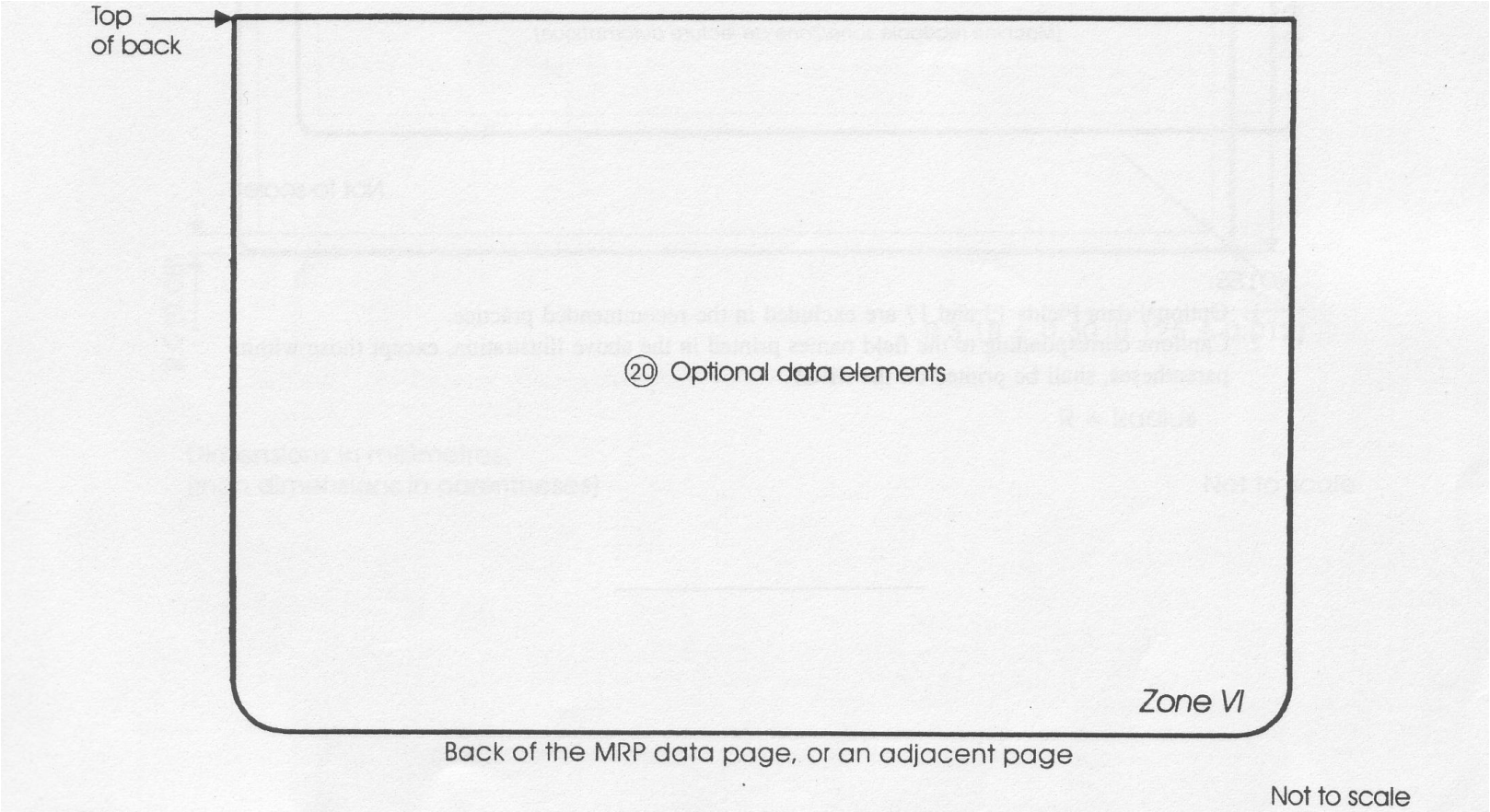
Field 18 – Holder’s signature or usual mark (VR), may be located in Zone VI (rear)

VIZ – zone location options

Data Feature - Digital Security



VIZ – zone VI

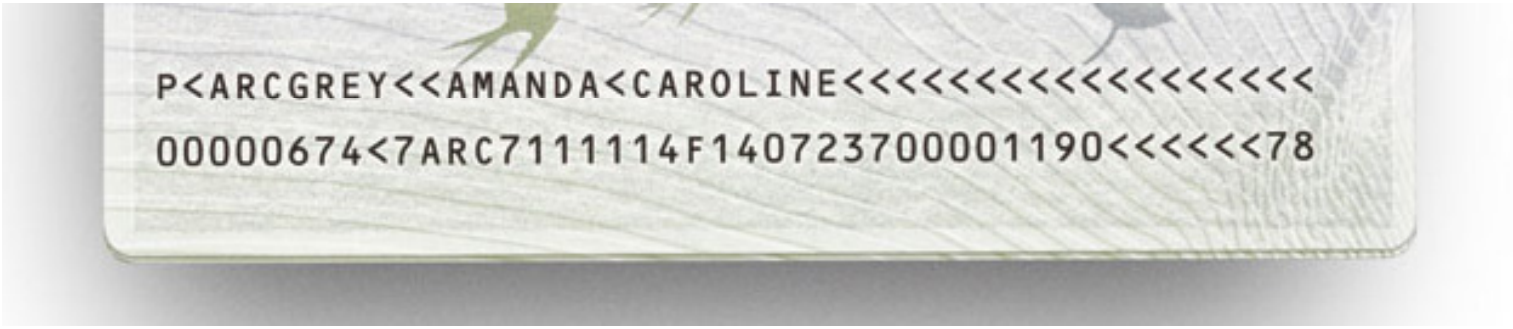

Top
of back
20 Optional data elements
Zone VI
Back of the MRP data page, or an adjacent page
Not to scale

Machine readable zone (MRZ)

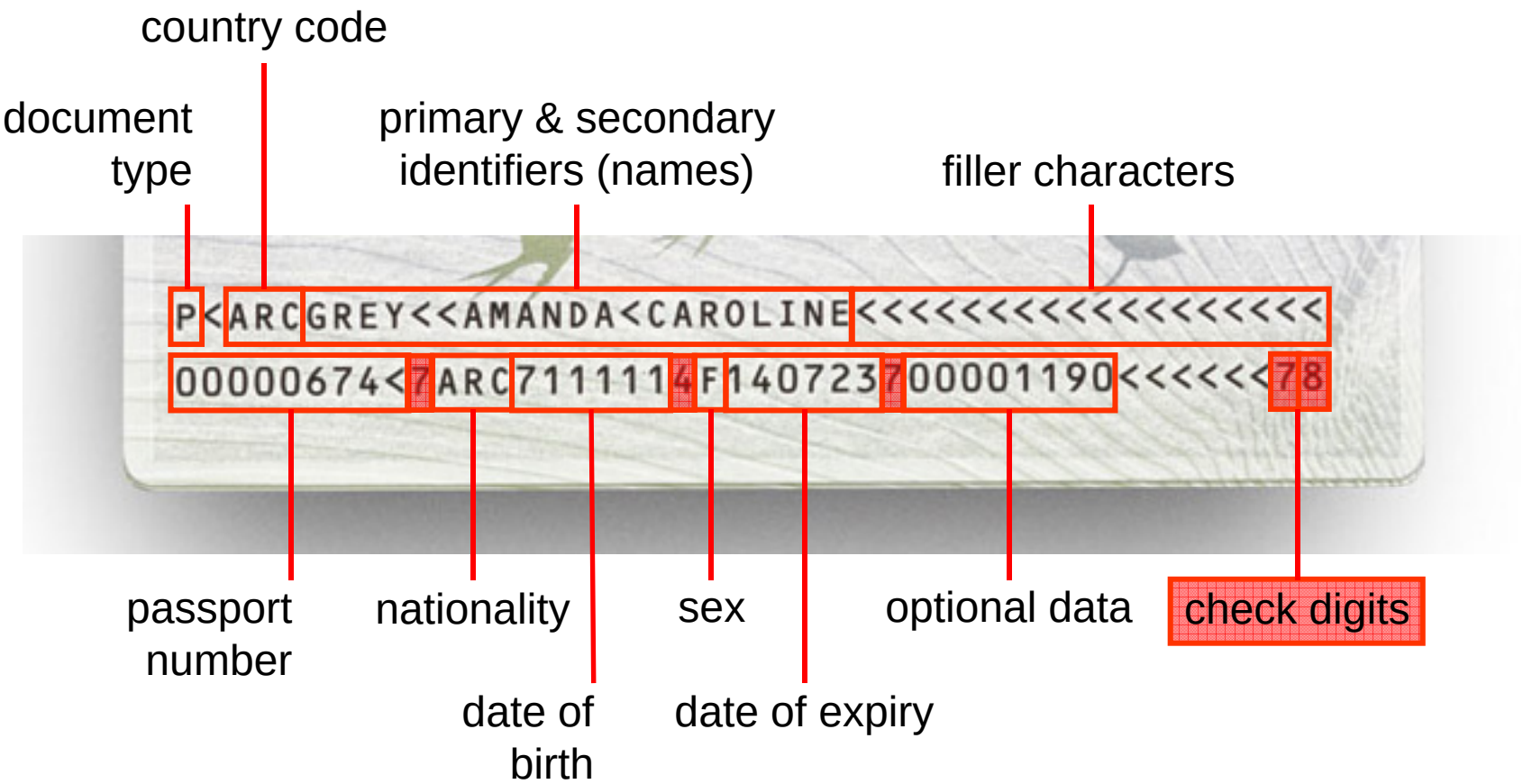
MRZ

MRZ – OCR-B

- “Machine readable information is contained in two lines of OCR-B text, each with 44 characters”. ICAO Doc 9303, II-2



MRZ – OCR-B


country code
document type
primary & secondary identifiers (names)
filler characters
P<ARCGREY<<AMANDA<CAROLINE<<<<<<<<<<<<<<<<<<<<
00000674<7ARC7111111 4F1407237 00001190<<<<<<78
passport number
nationality
sex
optional data
check digits
date of birth
date of expiry

VIZ – zone location options

Part 2 – Visa

- Interoperability a must? Airlines!
- 3 eVisa possibilities
  - in visa label
  - in database (also supporting label)
  - in ePassport chip (future possibility)

Visas
Why interoperability?

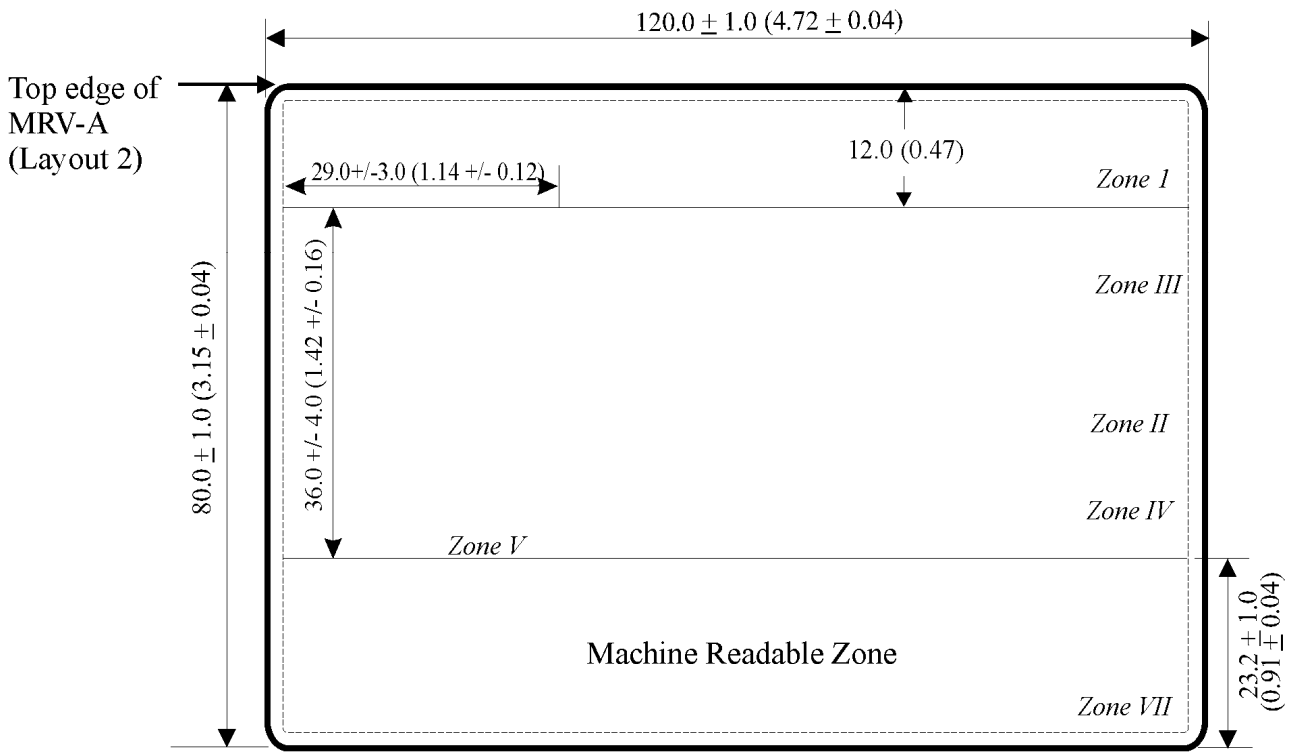
- International travel
- Border control – 191 member state
- Airlines – carriers' liability provisions
- Other private and public sector users (e.g. educational institutions and banks)

Example of MRV-A

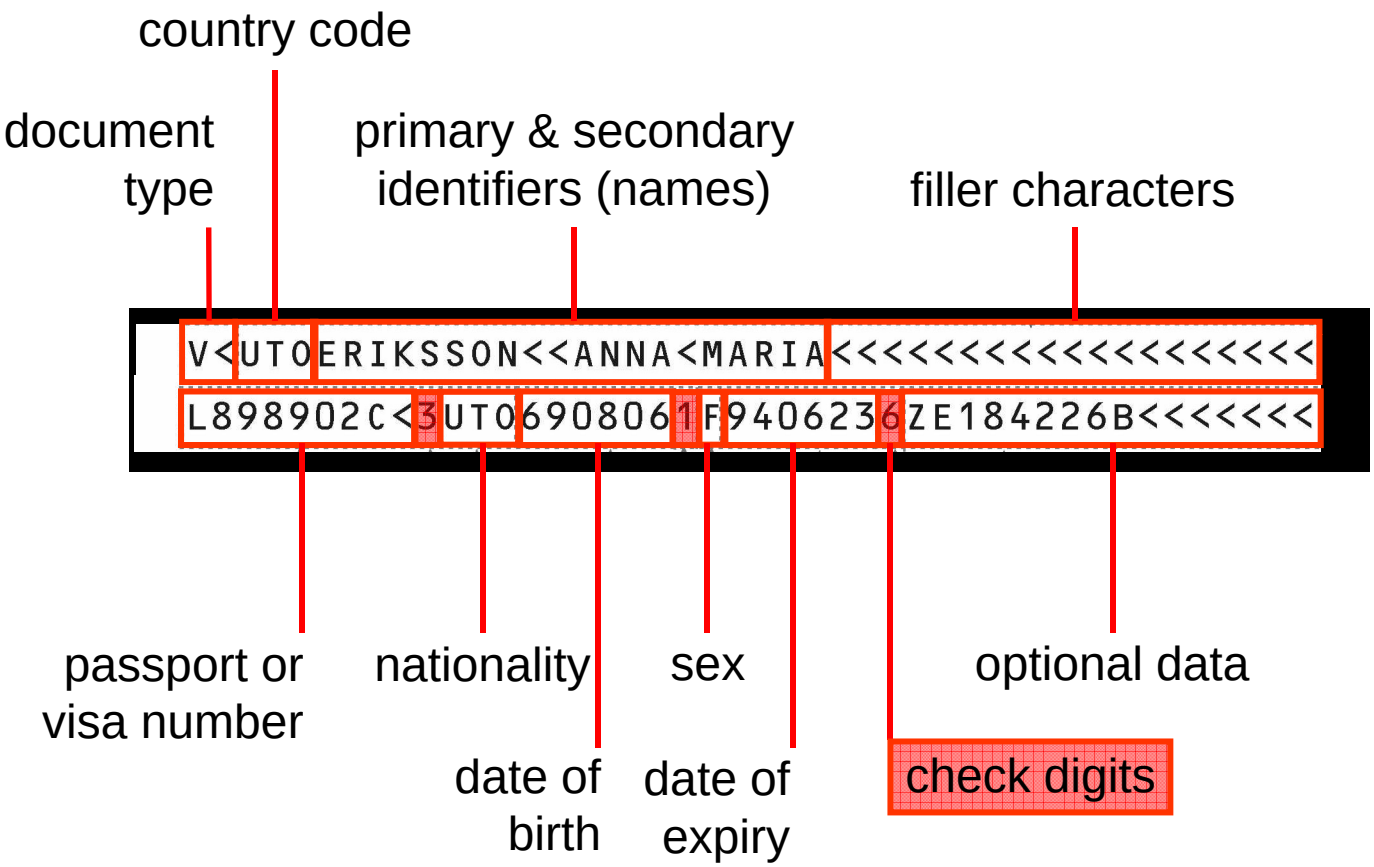
80mm

120mm

Zone boundaries: MRV-A



Machine-readable zone: MRV-A

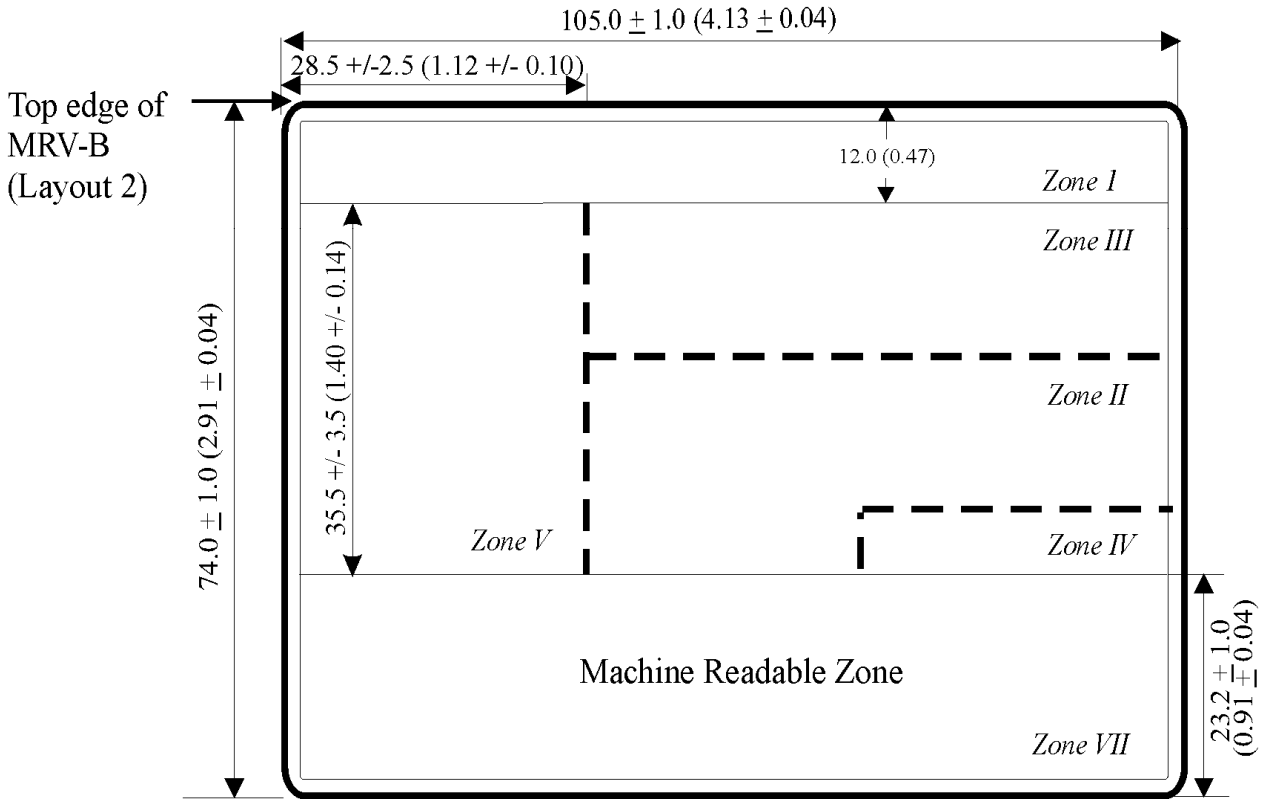


Example of MRV-B

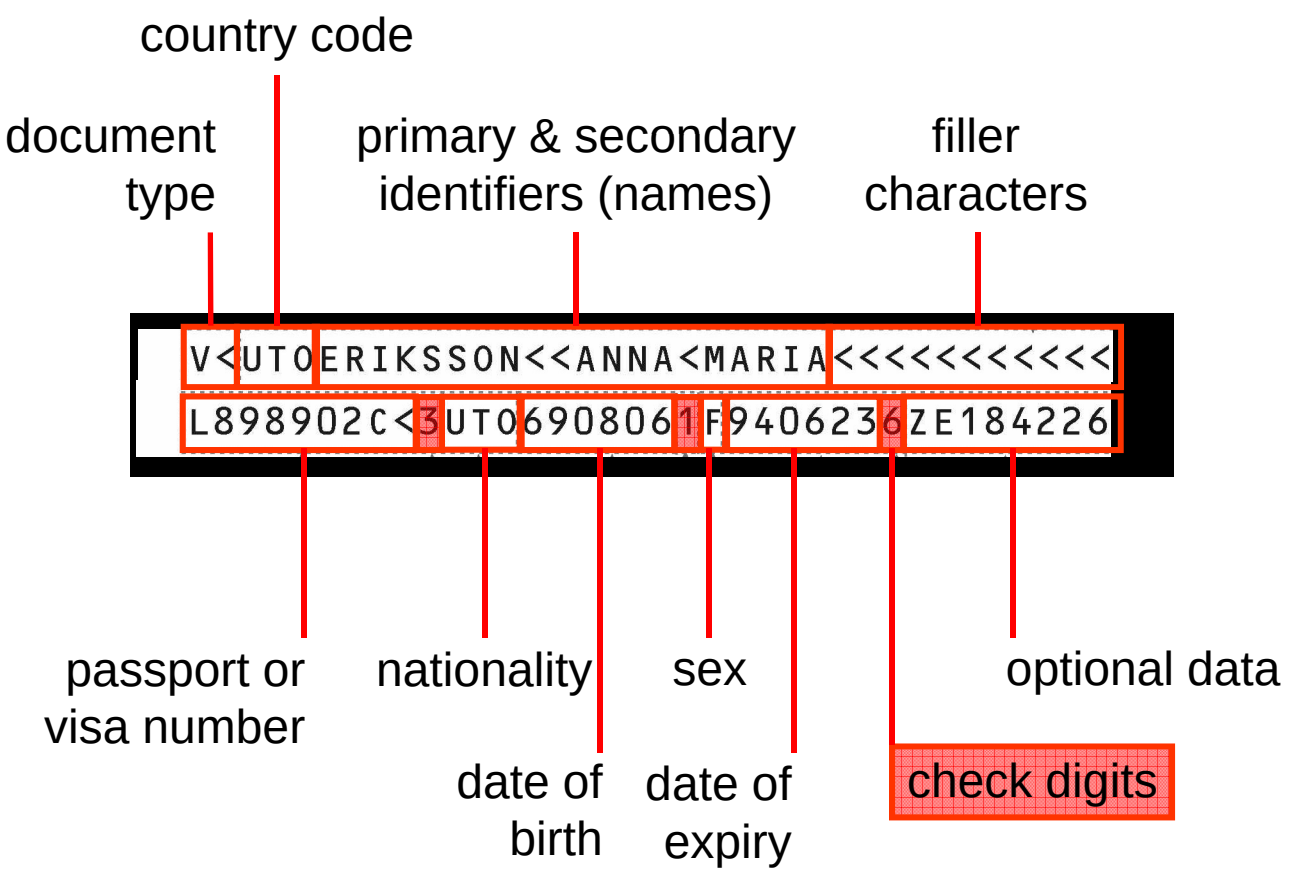
74mm

105mm

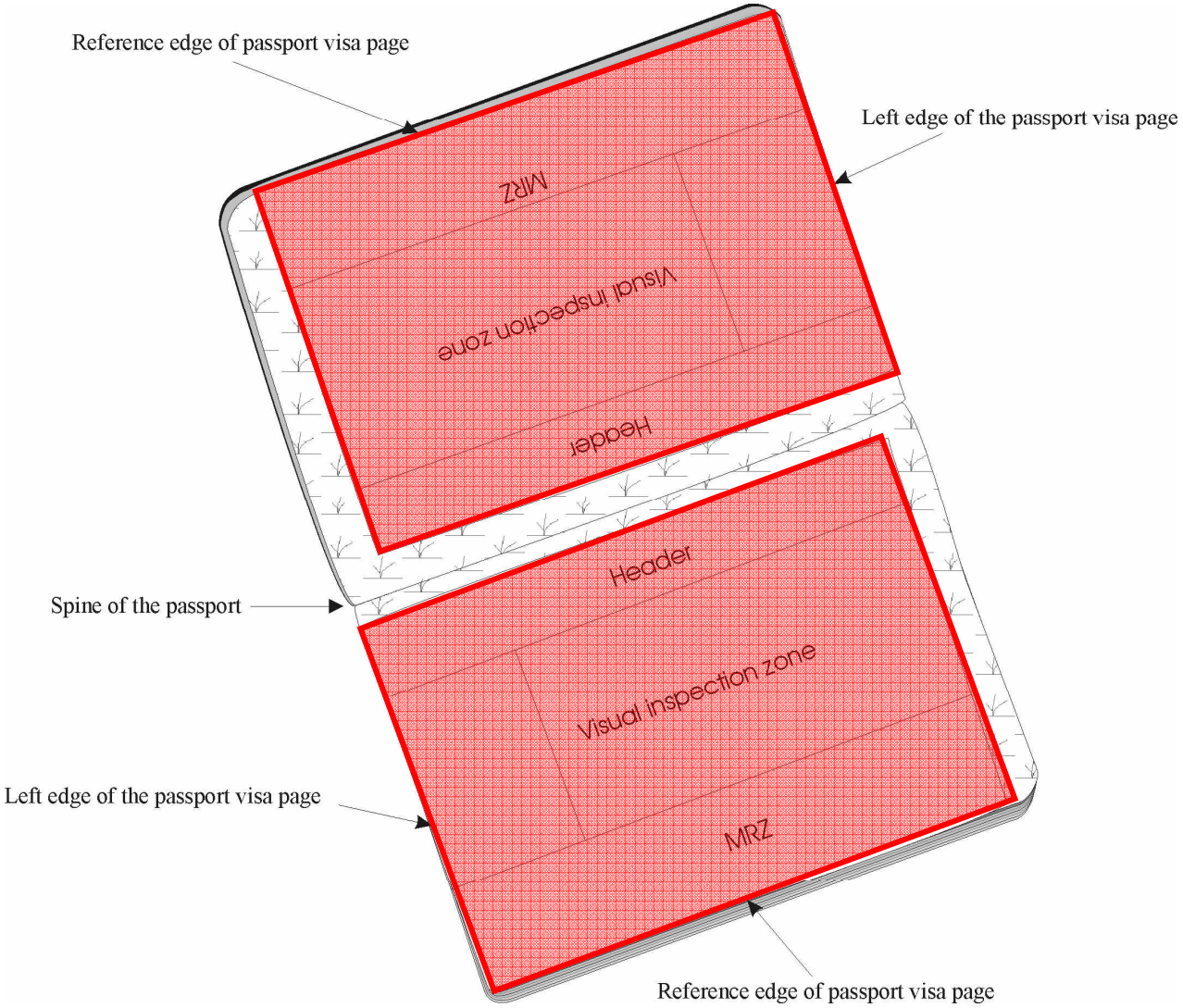
Zone boundaries: MRV-B



Machine-readable zone: MRV-B



Visa positioning in passport



Schengen MRV

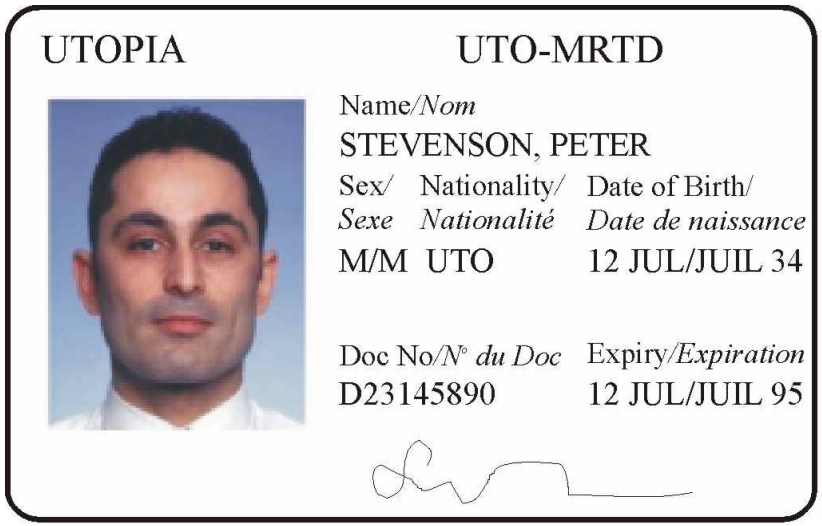
Part 3 – Official Travel Documents (cards)

- Currently many variations

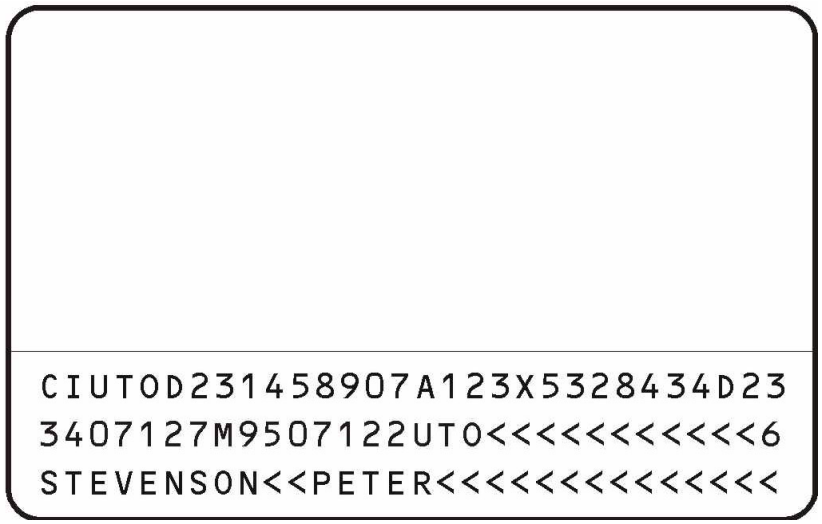
Example of td1 (ID1-sized card)

53.98mm

Front



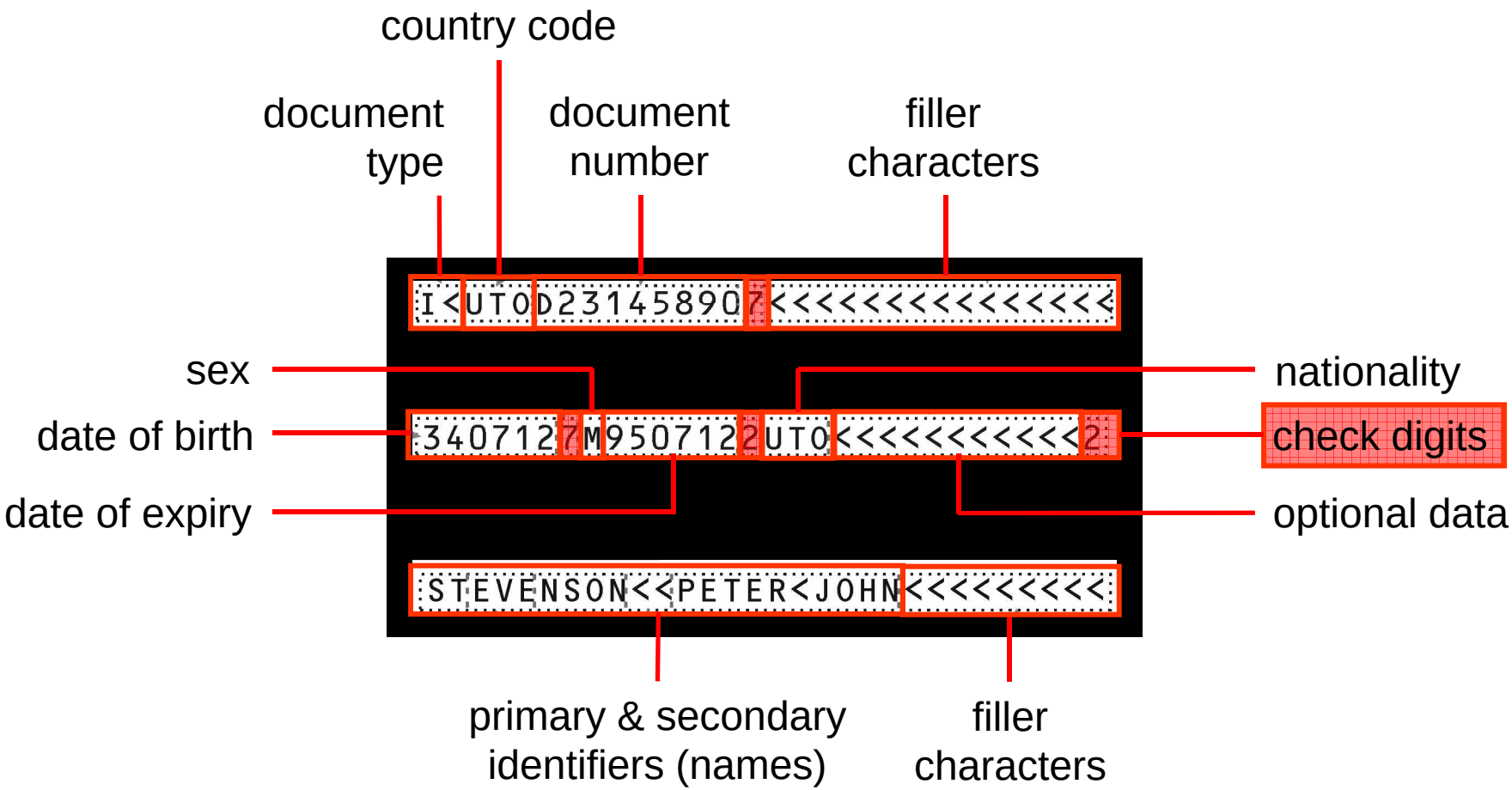
Rear



85.60mm

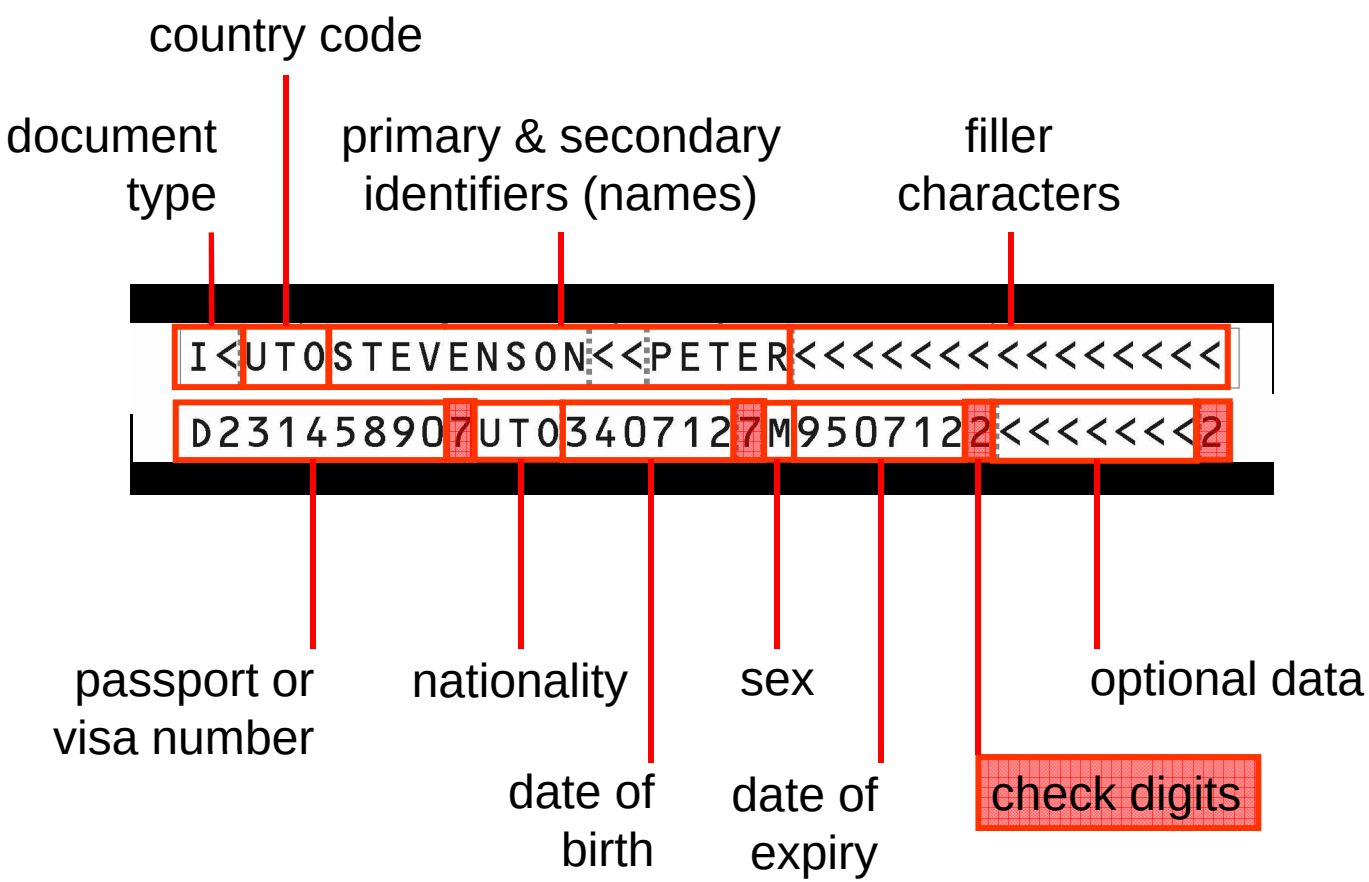
PACE: Introduction of a Card Access Number (CAN) will overcome issues at automated gates

Machine-readable zone: td1



Example of td2 (ID2-sized card)

Machine-readable zone: td2


country code
document type
primary & secondary identifiers (names)
filler characters
I<UTOSTEVENSON<<PETER<<<<<<<<<<<<<<<<
D23145890 7 UTO 3407127 7 M 9507122 2 <<<<<<<<<<<<<<<<

MRP Summary

- 183 out of 190 countries issuing MRPs
- 7 countries still not issuing MRPs
- 2 countries issuing Diplomatic/Service MRPs, but their ordinary passports are still non MRP
- Nearly all of these countries have tenders or contracts in place
- ICAO requirement for all countries to issue MRPs by 1st April 2010
- No non MRPs after 2015

eMRTDs

- I will now hand over to Robin Chalmers

- Thank you for your attention