



# OVERVIEW OF ICAO MRTD STANDARDS DEVELOPMENT

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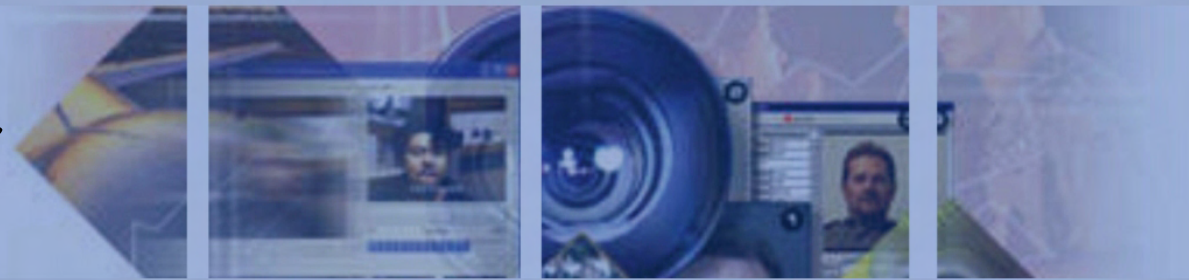
MRTD Symposium  
ICAO Headquarters, Montréal  
6 – 7 September 2006



# WHERE WE ARE TODAY

- ✱ ePassport specifications published (Doc 9303, Part 1, 6<sup>th</sup> Ed).
- ✱ 15 countries issuing ePassport.
- ✱ Public Key Directory project started.
- ✱ “non-MRP” countries to meet MRP Standard by April 2010.





# HOW WE GOT HERE

ICAO's mandate for standards  
development: The Convention on  
International Civil Aviation

MRTD Symposium  
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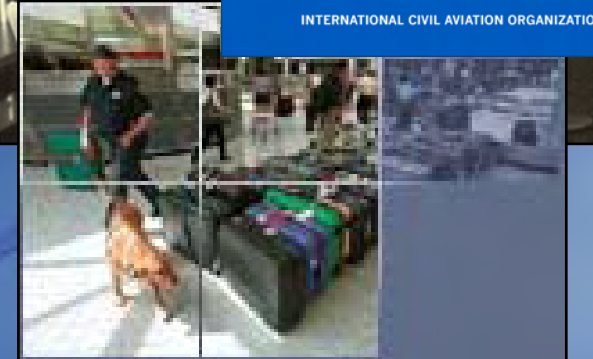
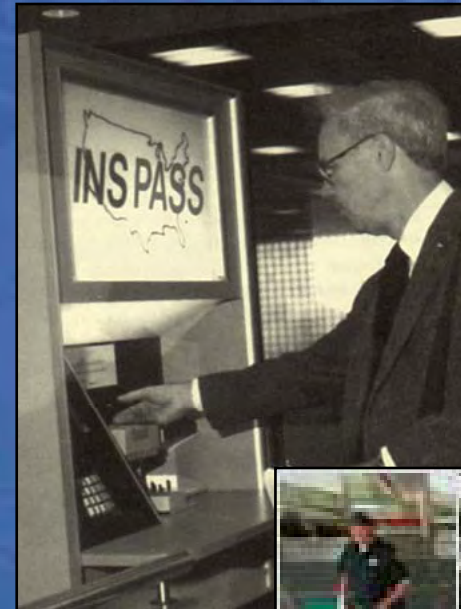
# **“Chicago Convention”, 1944 Created ICAO**

- ✱ To “meet the needs of the peoples of the world for safe, regular, efficient and economical air transport”.
- ✱ Mandates compliance with border control laws, facilitation of formalities, and global interoperability.



# Annex 9 to the Convention

## Passenger inspection at border control points



Annex 9  
To the Convention on  
International Civil Aviation

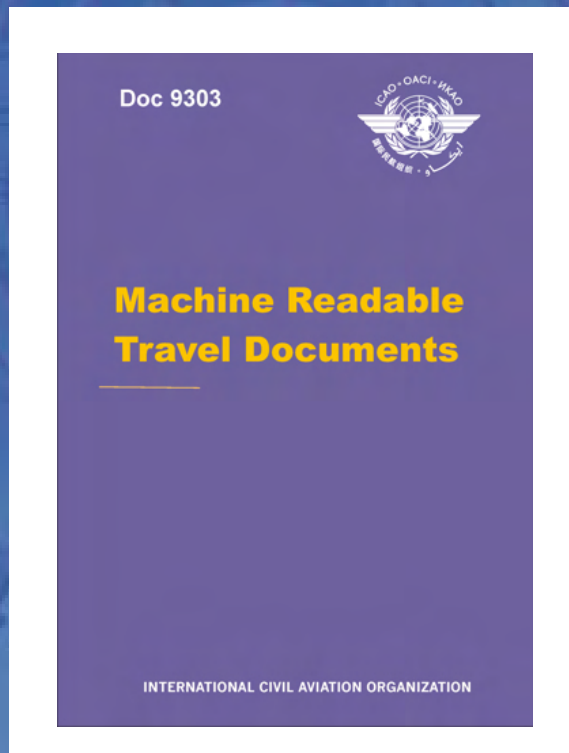
### Facilitation

INTERNATIONAL CIVIL AVIATION ORGANIZATION



# Doc 9303 – MRTDs specifications

✱ First edition 1980; now in 3 Parts





# Standards – ICAO TAG/MRTD



## Part 1 - Passport



## Part 2 - Visa



## Part 3 - Official Travel Document

# ISO : SC17 WG3

# ISO/IEC 7501



# Assembly Resolution 32-18

- ✱ 1998: Called for “International cooperation in protecting the security and integrity of passports”
- ✱ Updated in 2001; continued in 2004



# Security: Machine Readable Zone

[illegible]

Document Number

Check Digit

Country of Citizenship

Date of Birth

Check Digit

Sex

Date of Expiry

Check Digit

Optional Data

Check Digit

Check Digit

2<sup>nd</sup> Symposium on ICAO-Standard MRTD's, Biometrics and Security

9



# Authenticity



# Identity



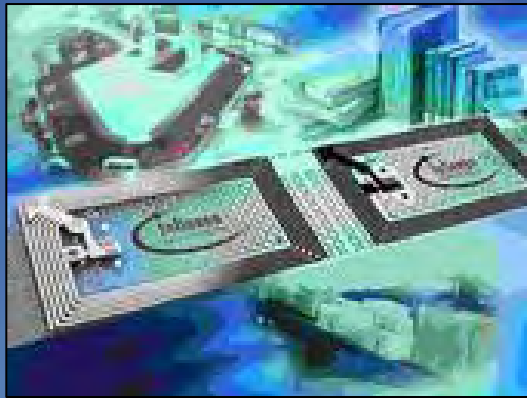
# Facilitation and Security

## Biometrics for identity confirmation



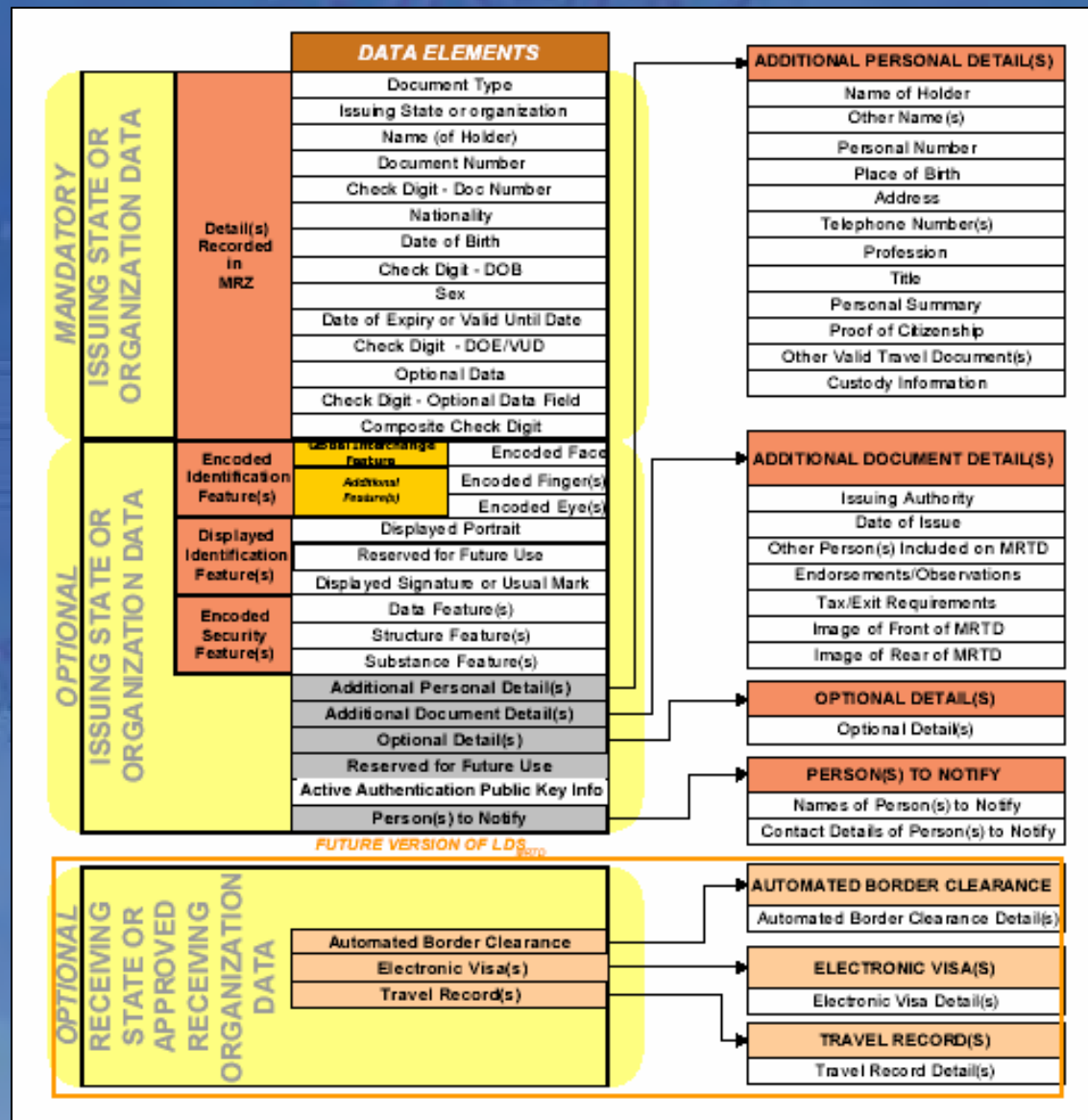


# Contact-less IC



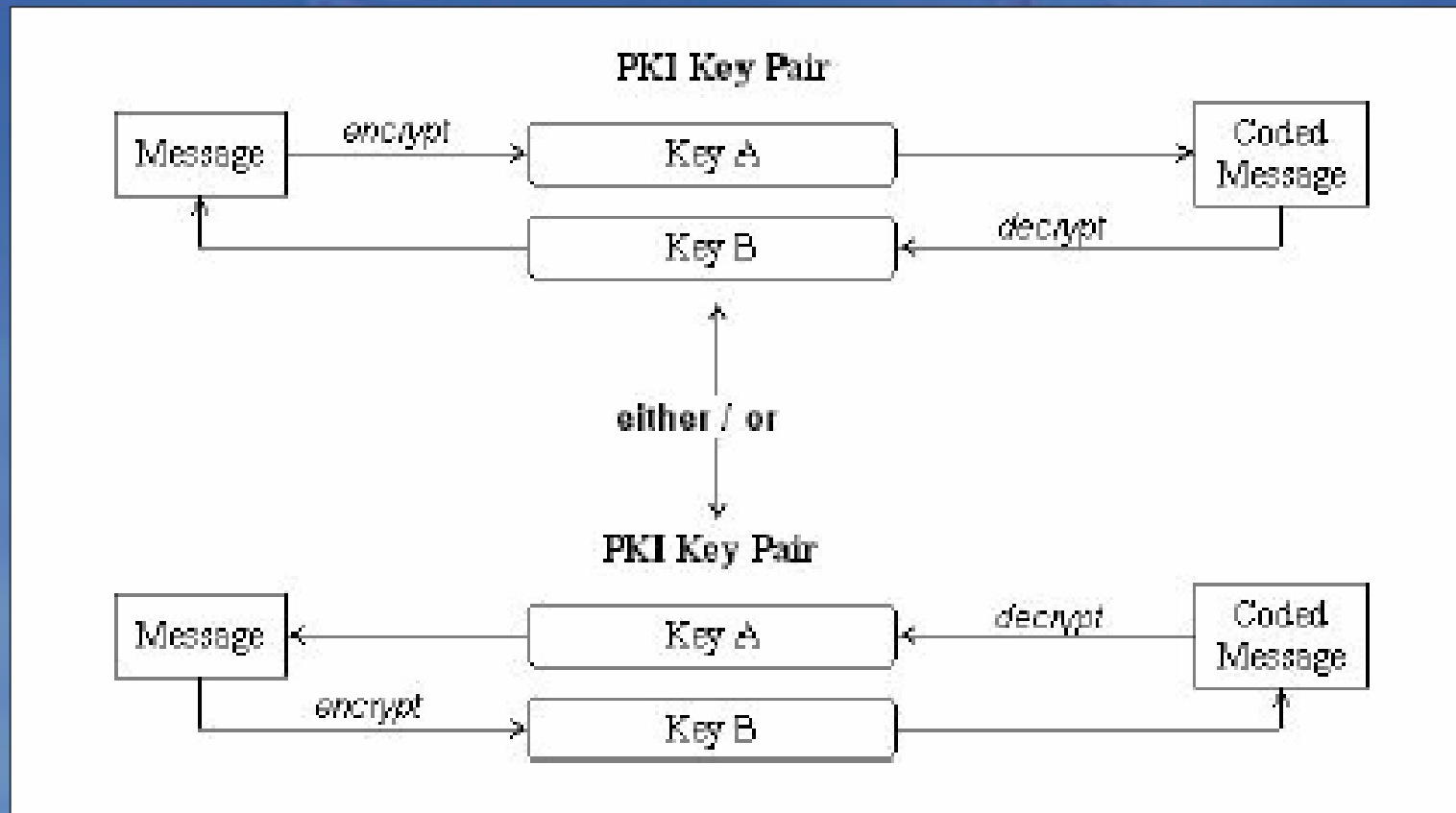


# Logical Data Structure





# PKI Digital Signatures





# Now: 6<sup>th</sup> Edition, Doc 9303, Part 1

## *Machine Readable Passports*

- ✱ Volume I specifications mandatory for *all* States issuing MRP.

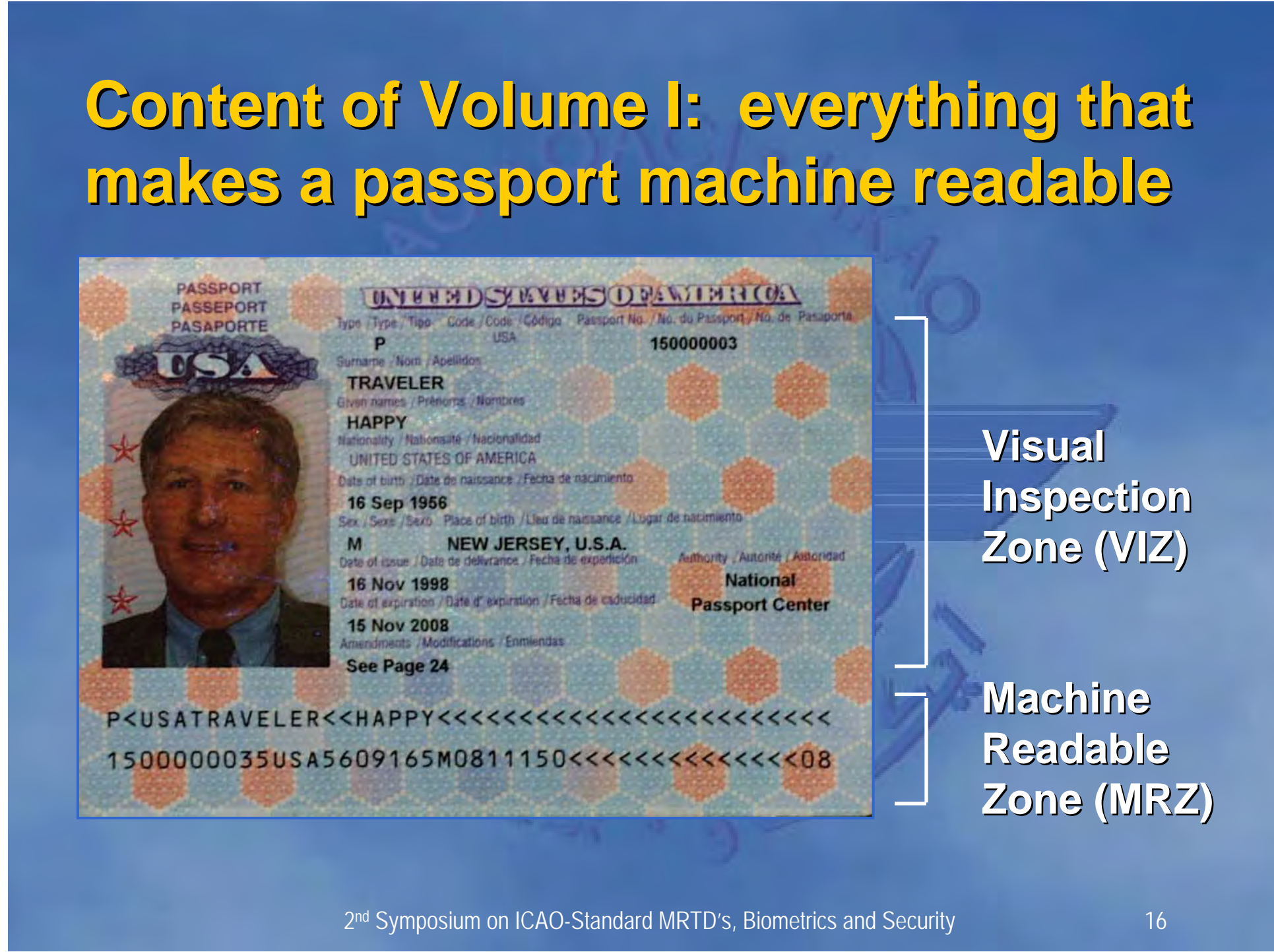
- ✱ Volume II (“e-passports”) specifications mandatory for States electing the option to enhance their MRP with biometric identification.



# Content of Volume I: everything that makes a passport machine readable

**Visual Inspection Zone (VIZ)**

**Machine Readable Zone (MRZ)**

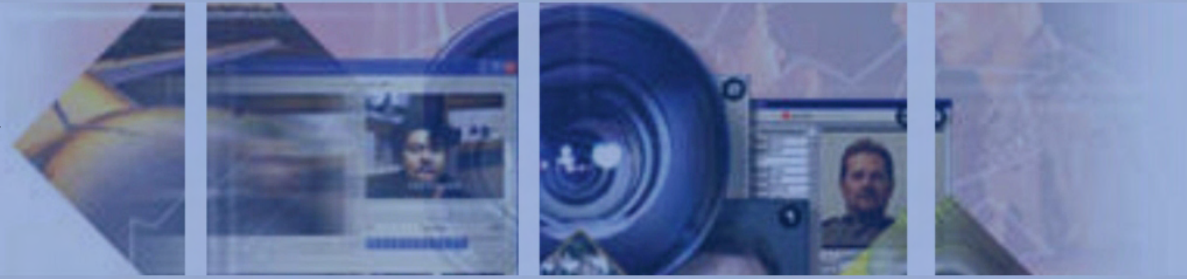
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## **Content of Volume II: everything that makes an MRP an e-passport**

- ✱ Specifications for face biometric
- ✱ Specifications for ISO/IEC 14443 “proximity” chip application
- ✱ Specifications for logical data structure
- ✱ Specifications for public key infrastructure including BAC





# WHERE WE ARE GOING

International cooperation to  
advance implementation  
of the Standards

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# NEXT STEPS

☀ Reading systems to be upgraded to read the ePassport chip as well as the MRZ.

- Airline check-in
- Aviation security
- Entry/exit processing



## IMPLEMENTATION, cont'd

- ✱ ePassport-issuing States to join the PKD as Participants.
- ✱ Users to connect to the PKD.
- ✱ “Worldwide trust” in the authenticity of ePassport data.



# IMPLEMENTATION PROJECTS

- ✱ To improve and secure the passport issuance process.

- ✱ To establish robust identity management systems.



# WINNERS: Nation States

- ✱ Better systems for securing borders against illegal migration, transborder crime, terrorism.
- ✱ Better systems for securing nations against fraud.



# **BIG WINNERS:** **the Peoples of the World**

- ✱ Worldwide travel – confidence in authentic identity documents.
- ✱ Protection from identity theft.
- ✱ Use of machine-assisted systems.
- ✱ Shorter lines.



# Thank you

## www.icao.int/mrtd

