



INTERNATIONAL CIVIL AVIATION ORGANIZATION

ICAO Regional Seminar on MRTDs, Biometrics and Border Security

30 November - 2 December 2011
Singapore

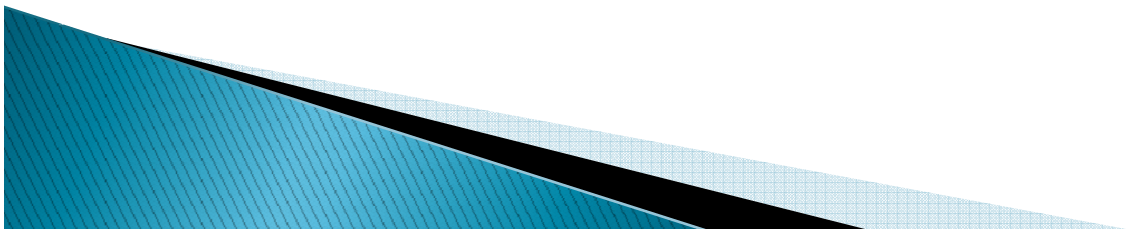


Key Elements of the e-MRTD
Robin Chalmers
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E-MRTD Key Elements

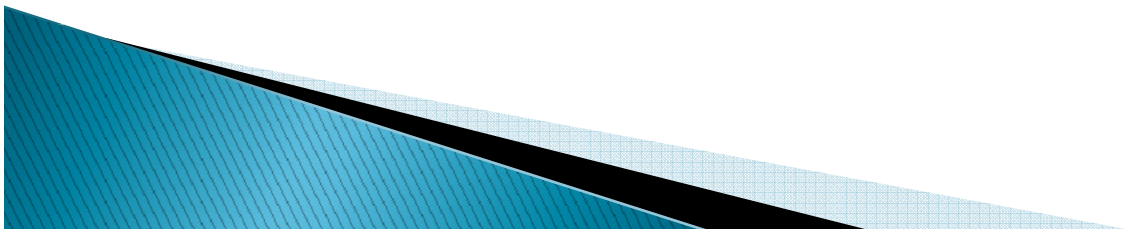
What puts the E in the E Passport?

- ▶ CHIP
- ▶ LOGICAL DATA STRUCTURE (LDS)
- ▶ DATA SECURITY
- ▶ PUBLIC KEY INFRASTRUCTURE (PKI)



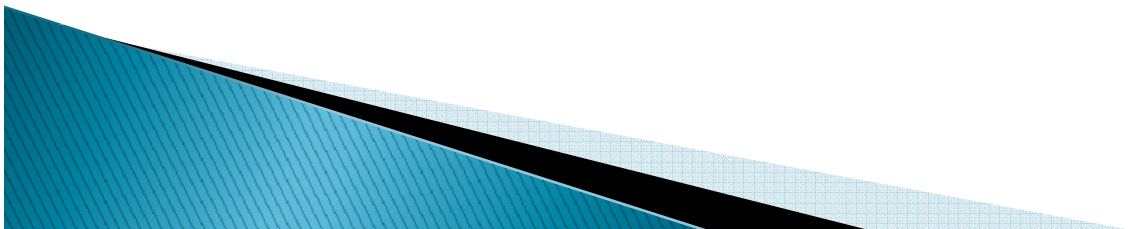
CHIP

- ▶ Reliability
- ▶ Location



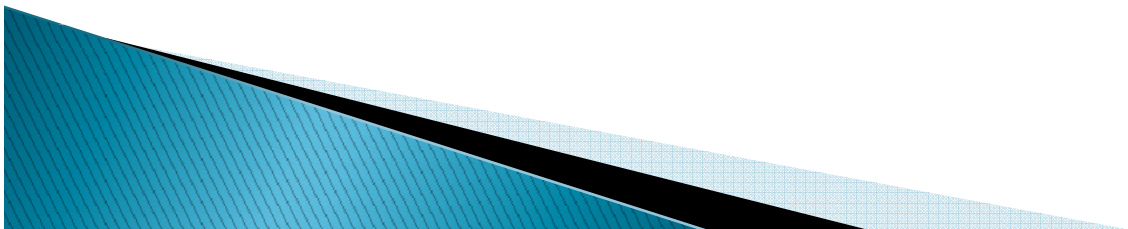
LOGICAL DATA STRUCTURE

- ▶ Electronic representation of the data page
- ▶ Data Groups
- ▶ LDS2



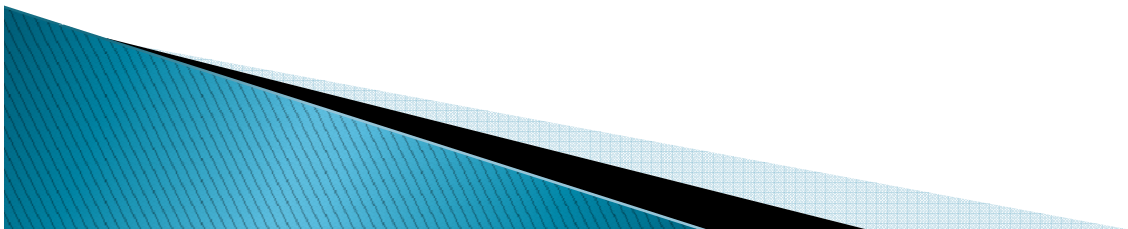
DATA SECURITY

- ▶ Privacy concerns
- ▶ Skimming
- ▶ Eavesdropping
- ▶ Cloning
- ▶ Security Measures



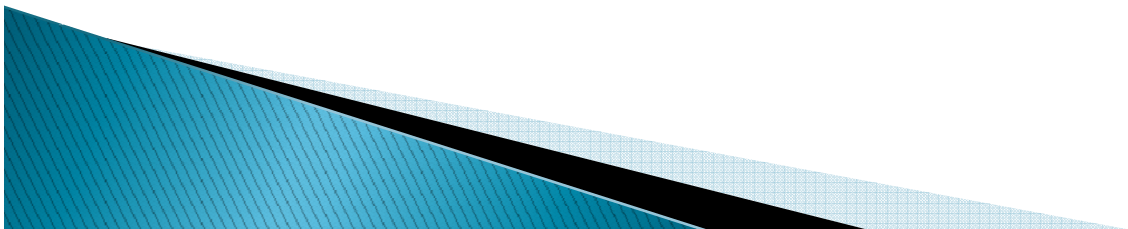
PUBLIC KEY INFRASTRUCTURE

- ▶ Validation of data
- ▶ Private & public keys
- ▶ Public Key Directory (PKD)



CONCLUSION

- ▶ MRTD specifications have endured
- ▶ VIZ/MRZ remain as originally envisaged
- ▶ E-MRTD enhances travel document security
- ▶ E-MRTD has increased use of automated borders



Thank You
Robin Chalmers

