

**Regional Seminar on MRTDs, Biometrics and Identification Management
Sint Maarten, 9-11 July 2013**



ICAO MRTD and eMRTD Standards and Specifications

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The Doc 9303 standard

- Part 1 - Machine Readable Passports, Sixth edition - 2006
 - Volume 1 - Passports with Machine Readable data stored in OCR format
 - Volume 2 - Electronically enabled Passports with Biometric Identification Capability
- Part 2 - Machine Readable Visas, Third edition - 2005
- Part 3 - Machine Readable Official Travel Documents, Third edition - 2008
 - Volume 1 - MRtds with Machine Readable data stored in OCR format
 - Volume 2 - Electronically enabled MRtds with Biometric Identification Capability
- Supplement to Doc 9303, Release 12 - 2013
- Technical Reports

<http://www.icao.int/security/mrtd/pages/default.aspx>

Doc 9303 revision

- Three activities
 - Clean up Supplement
 - Incorporate Technical Reports
 - Re-structure Doc 9303

Clean-up Supplement

- Supplement Release 12 - 2013
- 155 issues
 - Clarifications
 - Interpretations
 - Fixes
- Doc 9303 readability
- Incorporate Supplement issues into Doc 9303

Incorporate Technical Reports

- TR - MRTDs: History, Interoperability and Implementation
- TR - CSCA Countersigning and Master List issuance
- TR - LDS and PKI Maintenance
- TR - Supplemental Access Control for MRTDs
- TR - Machine reading options for td1 size MRTDs
- TR - Machine Assisted Document Security Verification
- TR - Transliteration of Arabic Script in MRTDs

Incorporate Technical Reports

- TR - MRTDs: History, Interoperability and Implementation
 - Version 1.4 - March 2007
- Summary of ICAO key decisions
 - Policies
 - Procedures
 - Technology
- Guide in using specifications
 - Doc 9303
 - Supplement
 - Technical reports
- Concepts
 - Global interoperability
 - Uniformity
 - Technical reliability
 - Practicality
 - Quality

Incorporate Technical Reports

- TR - CSCA Countersigning and Master List issuance
 - Version 1.0 - June 2009
- Bilateral exchange of CSCA certificates
 - Lack of specified mechanisms
 - Inefficiency
- CSCA certificate distribution/publication mechanism
 - Electronically
 - Publication of signed list of received & validated certificates
 - PKD

Incorporate Technical Reports

- TR - LDS and PKI Maintenance
 - Version 1.0, May 2011
- Evaluation of the standard
 - Accuracy
 - Security
 - Especially cryptographic security features and PKI
- Updated specifications
 - LDS version number electronically signed
 - Updated certificate profiles
 - Access Control
 - Active Authentication with Elliptic Curve Cryptography

Incorporate Technical Reports

- TR - Supplemental Access Control for MRTDs
 - Version 1.01 - November 2010
- Basic Access Control recommended feature
 - Anti skimming (access control)
 - Anti eavesdropping (session encryption)
 - Strength limited by design
 - 5 & 10 years passport validity periods
- Supplemental to Basic Access Control
 - PACE V2 (Password Authenticated Connection Establishment)
 - Strength of session keys independent of password
 - Password: Document Number, Date-of-Birth, Date-of-Expiry
 - Password: Card Access Number

Incorporate Technical Reports

- TR - Machine reading options for td1 size MRTDs
 - Version 1.0, April 2011
- Machine reading issue
 - MRZ on rear side
 - Biographical profile (including photograph) on front side
 - Document related features on front side
 - Card turning
- Study on options for one-side reading
- Non-chip enabled
 - One-line MRZ
 - (2D) barcode
 - Further study
- Chip enabled
 - Chip access
 - CAN position specified

Incorporate Technical Reports

- TR - Machine Assisted Document Security Verification
 - Version 1.0, July 2011
- Updates/Replaces Doc 9303 Informative Appendix
 - Machine-assisted document security verification
- Machine authentication of document security features
 - Materials
 - Security printing
 - Copy protection techniques
- Advice on reader technologies

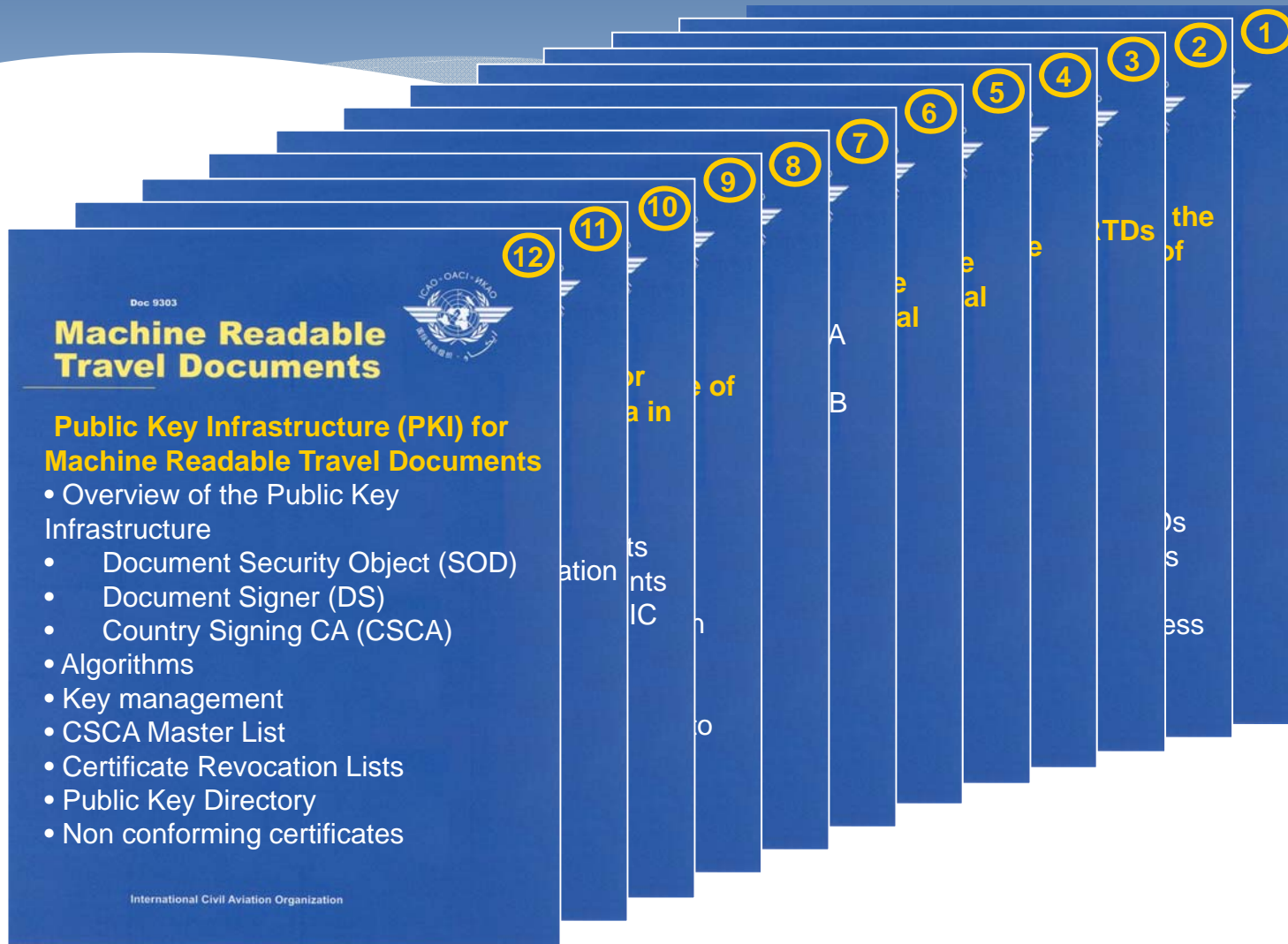
Incorporate Technical Reports

- TR - Transliteration of Arabic Script in MRTDs
 - Version 2.9, July 2012
- VIZ
 - Doc 9303 mandates provision of Latin character equivalent
 - Transcription
 - Transliteration
- MRZ
 - MRZ character set
 - Unambiguous - database searches
 - Reversible

Re-structure Doc 9303

- Different publication dates for different parts
- Until 2009 paper based
 - Separate (complete) standards for part 1, 2 and 3
 - Duplicate, mainly general, information
 - Volumes 2 of part 1 and 3 almost identical
- Since 2009 electronic (pdf) format
 - Maintenance
 - Readability
 - Efficiency
- Restructuring
 - Specifications appear only once
 - Grouping of general as well as form factor specific specifications
 - Set of (pdf) files
 - User composes relevant subset

Re-structure Doc 9303



Re-structure Doc 9303

- ePassport book



Re-structure Doc 9303

- Non-chip td1 card



Doc 9303 revision project

- Three activities - Three phases
 - Phase 1 - Re-structuring
 - Phase 2 - Supplement incorporation
 - Phase 3 - Technical Reports incorporation
- Timeline
 - New structure design - Q4 2011
 - Re-structuring finalized - Q3 2012
 - Supplement issues incorporated - Q4 2012
 - Technical Reports incorporated - Q2 2013
 - Ready for translation / publication - Q4 2013



THANK YOU



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