The 7th edition of ICAO Doc 9303

July 2015: ICAO publishes the 7th edition of Doc 9303

Part 1	Part 2	Part 3	Part 4	Part 5	Part 6
Part 7	Part 8	Part 9	Part 10	Part 11	Part 12
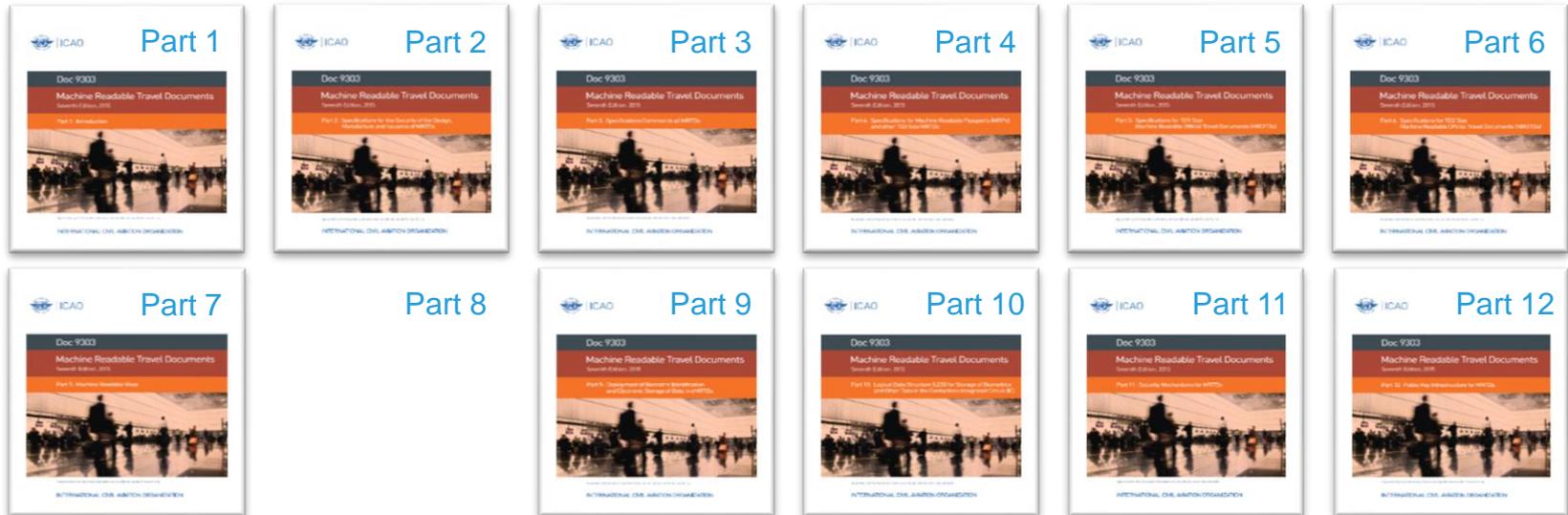
The 7th edition of ICAO Doc 9303

Until July 2015: Doc 9303 3rd / 6th edition
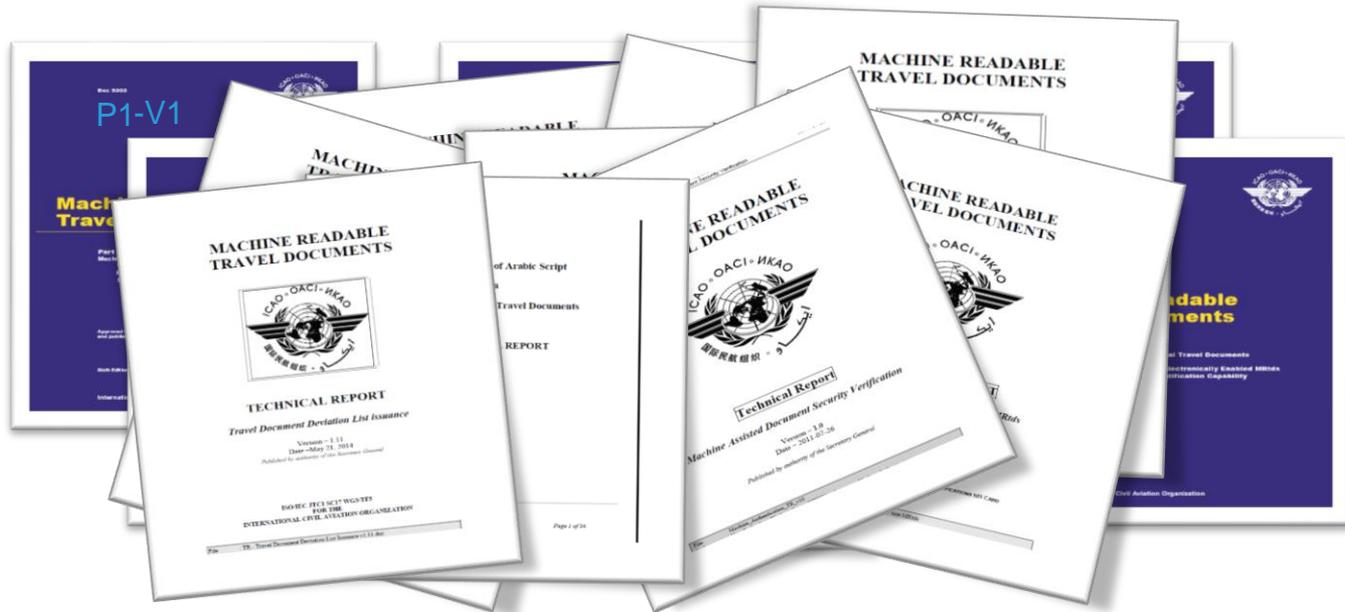
The 7ᵗʰ edition of ICAO Doc 9303

Until July 2015: Doc 9303 3rd / 6th edition

- **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 14 – 2014**
  - 176 pages – 253 issues

- **8 Technical reports**

September 2011: Doc 9303 revision

- Re-structuring
  - From 3 to 12 parts
- Supplement incorporation
  - From 253 to 0 issues
- Technical Reports incorporation
  - From 8 to 0 Technical Reports

The 7th edition of ICAO Doc 9303

Doc 9303: Seventh Edition

1. Introduction
2. Specifications for the Security of Design, Manufacture and Issuance of MRTDs
3. Specifications common to all Machine Readable Travel Documents
4. Specifications specific to TD3 size MRTDs, Machine Readable Passports
5. Specifications specific to TD1 size MRTDs, Machine Readable Official Travel Documents
6. Specifications specific to TD2 size MRTDs, Machine Readable Official Travel Documents
7. Machine Readable Visas
8. Reserved for future use (Emergency Travel Documents)
9. The Deployment of Biometric Identification and Electronic Storage of Data in MRTDs
10. Logical Data Structure
11. Security Protocols
12. Public Key Infrastructure for Machine Readable Travel Documents

The 7ᵗʰ edition of ICAO Doc 9303

Part 1: Introduction

1. Foreword
2. Scope
3. General considerations
4. Definitions and Abbreviations
5. Guidance on the use of Doc 9303
6. References

Part 2: **Specifications for the Security of Design, Manufacture and Issuance of MRTDs**
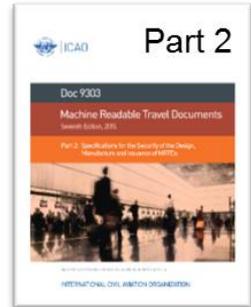
1. Scope
2. Security of the MRTD and its Issuance
3. Machine Assisted Document Verification
4. Security of MRTD Production and Issuance Facilities
5. Provision of Information on Newly Issued MRTDs
6. Provision of Information on Lost and Stolen MRTDs

Appendix A – Security Standards for MRTDs

Appendix B – Machine Assisted Document Security Verification

Appendix C – The Prevention of Fraud Associated with the Issuance Process

Appendix D – ASF/SLTD Key Considerations

The 7th edition of ICAO Doc 9303

Part 3: Specifications Common to all Machine Readable Travel Documents

1. Scope
2. Physical Characteristics of MRTDs
3. Visual Inspection Zone (VIZ)
4. Machine Readable Zone (MRZ)
5. Codes for Nationality, Place of Birth, Location of Issuing State/Authority and other Purposes
6. Transliterations Recommended for Use by States
7. Deviations
8. References

Appendix A – Examples of Check Digit Calculation

Appendix B – Arabic Transliteration, Details and Examples
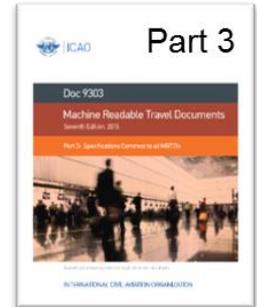
The 7ᵗʰ edition of ICAO Doc 9303

Part 4: Specifications for Machine Readable Passports (MRPs) & other TD3 size MRTDs

1. Scope
2. Construction and Dimensions of the MRP and MRP Data Page
3. General Layout of the MRP Data Page
4. Contents of the MRP Data Page
5. References

Appendix A – Examples of a Personalized MRP Data Page

Appendix B – Construction of the Machine Readable Zone of the Passport Data Page

Part 4

ICAO

Doc 9303
Machine Readable Travel Documents
Seventh Edition, 2015
Part 4: Specifications for Machine Readable Passports (MRPs) and other TD3 size MRTDs
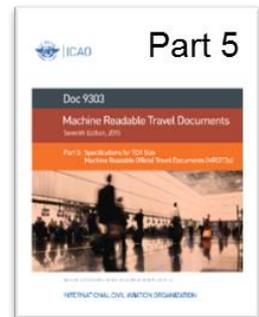
INTERNATIONAL CIVIL AVIATION ORGANIZATION

Part 5: **Specifications for TD1 size Machine Readable Official Travel Documents (MROTDs)**

1. Scope

2. Dimensions of the TD1 size MROTD

3. General Layout of the TD1 size MROTD

4. Contents of a TD1 size MROTD

5. References

Appendix A – Examples of a Personalized TD1 size MROTD

Appendix B – Construction of the Machine Readable Zone of a TD1 size MROTD

Appendix C – Technical Specifications for a Machine Readable Crew Member Certificate (CMC)
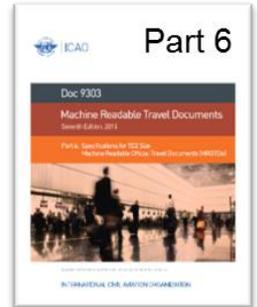
Part 6: **Specifications for TD2 size Machine Readable Official Travel Documents (MROTDs)**

1. Scope

2. Dimensions of the TD2 size MROTD

3. General Layout of the TD2 size MROTD

4. Contents of a TD2 size MROTD

5. References

Appendix A – Examples of a Personalized TD2 size MROTD

Appendix B – Construction of the Machine Readable Zone of a TD2 size MROTD

The 7th edition of ICAO Doc 9303

Part 7: Machine Readable Visas

1. Scope
2. Technical Specifications for Format-A Machine Readable Visas (MRV-A)
3. General Layout of the MRV-A
4. Detailed Layout of the MRV-A
5. Technical Specifications for Format-B Machine Readable Visas (MRV-B)
6. General Layout of the MRV-B
7. Detailed Layout of the MRV-B
8. Use of Optional barcodes on Machine Readable Visas
9. References

Appendix A – Examples of a Personalized MRVs

Appendix B – Construction of the MRZ

Appendix C – Positioning in Passport

Appendix D – Materials and Production Methods

Part 7

Doc 9303
Machine Readable Travel Documents
Seventh Edition, 2015

Part 7: Machine Readable Visas

INTERNATIONAL CIVIL AVIATION ORGANIZATION

Part 8: Reserved for future use

- ➤ Emergency Travel Documents

Part 9: **Deployment of Biometric Identification and Electronic Storage of Data in eMRTDs**

1. Scope

2. eMRTD

3. Biometric Identification

4. The Selection of Biometrics Applicable to eMRTDs

5. Storage of the Biometric and other Data in a Logical Format in a Contactless IC

6. Test Methodologies for (e)MRTDs

7. References

Appendix A – Placement of the Contactless IC in an eMRP

Appendix B – Process for Reading eMRTDs

Part 10: Logical Data Structure (LDS) for Storage of Biometrics and other Data in the Contactless IC

1. Scope

2. Requirements of the Logical Data Structure

3. Application Profile for the Contactless IC

4. File Structure Specifications

5. Elementary Files

6. Data Elements Forming Data Groups 1 through 16

7. References

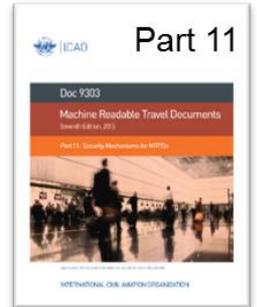Appendix A – Logical Data Structure Mapping Examples
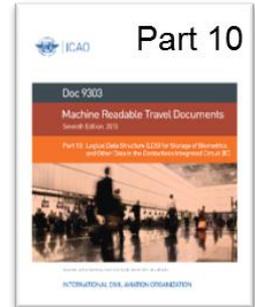
The 7th edition of ICAO Doc 9303

Part 11: Security Mechanisms for eMRTDs

1. Scope
2. Assumptions and Notations
3. Securing Electronic Data
4. Access to the Contactless IC
5. Authentication of Data
6. Authentication of the Contactless IC
7. Additional Access Control Mechanisms
8. Inspection System
9. Common Specifications
10. References

Part 11: Security Mechanisms for MRTDs (continuation)

Appendix A – Entropy of the MRZ-Derived Access Keys

Appendix B – Point Encoding for the ECDH-Integrated Mapping
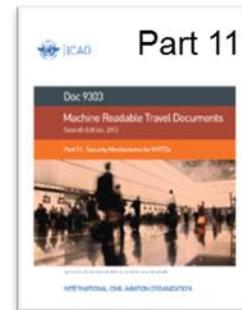
Appendix C – Challenge Semantics

Appendix D – Worked Example: Basic Access Control

Appendix E – Worked Example: Passive Authentication

Appendix F – Worked Example: Active Authentication

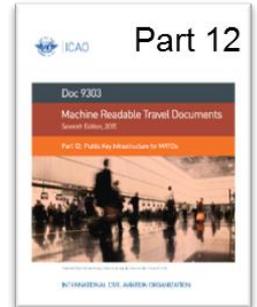Appendix G – Worked Example: PACE – Generic Mapping

Appendix H – Worked Example: PACE – Integrated Mapping

The 7ᵗʰ edition of ICAO Doc 9303

Part 12: Public Key Infrastructure for MRTDs

1. Scope
2. Overview of the Public Key Infrastructure
3. Roles and Responsibilities
4. Key Management
5. Distribution Mechanisms
6. PKI Trust and Validation
7. Certificate and CRL Profiles
8. CSCA Master List Structure
9. References
10. Appendix A – Lifetimes
11. Appendix B – Certificate and CRL Profile Reference Text
12. Appendix C – Earlier Certificate Profiles
13. Appendix D – RFC 5280 Validation Compatibility

Part 12

Doc 9303
Machine Readable Travel Documents
Seventh Edition, 2015

Part 12: Public Key Infrastructure for MRTDs

INTERNATIONAL CIVIL AVIATION ORGANIZATION

Using the seventh edition

ePassport book

Part 1

Part 2

Part 3

Part 4

Part 9

Part 10

Part 11

Part 12
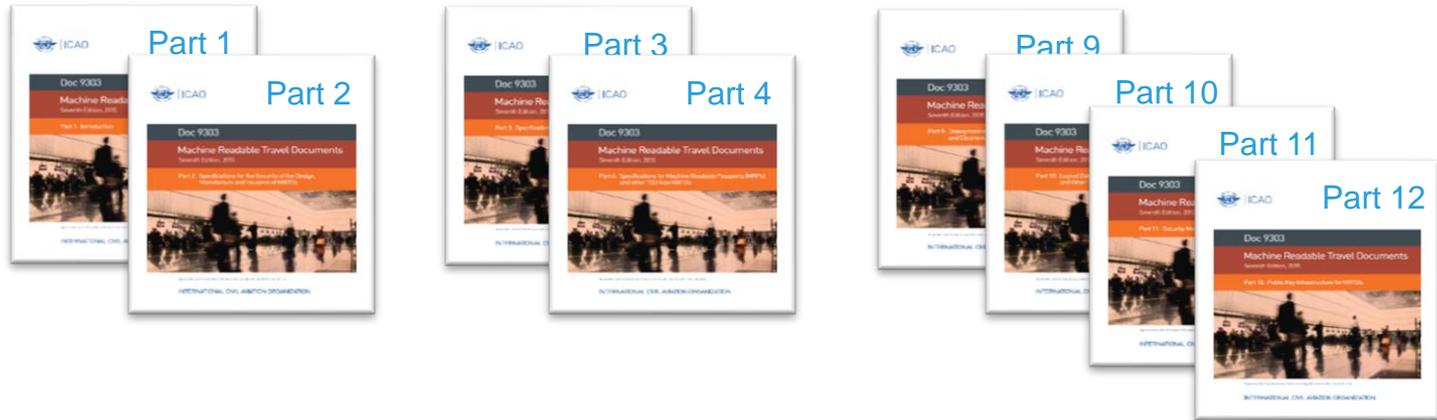
The 7th edition of ICAO Doc 9303

Using the seventh edition

Chipless TD1 size card

Characteristics of the Seventh Edition

- No more 'Duplicates'
- Normative Specifications in Main Body, Informative Appendices
- Consistant Terminology
  - Form Factor
  - MRTD, eMRTD
  - MRP, eMRP
  - MROTD, eMROTD
- Consistant Formatting
  - Titles, Text, Notes
  - Figures, Tables

UTOPIA VISA

Place of Issue/Lieu de délivrance   Valid from/Valide à partir du   Valid until/Valide jusqu'au
ZENITH   10DEC 91   10DEC 96
No. of Entries/Nombre d'entrées   Document No./N° de document:
MULTIPLE   M123889546
Type/Type
BUSINESS MULTIPLE
Surname, Given names/Nom, Prénoms
ERIKSSON ANNA MARIA
Passport Number   Sex: Date of Birth   Nationality
L8988901C   F /F   07SEP 40   XXX
Signature of Issuing Officer
John Doe

V<UTOERIKSSON<<ANNA<MARIA<<<<<<<<<<<<<<<<<<<
L8988901C0XXX4009072F96121096ZE184226B<<<<<<

1075 Pages !!!!

565 Pages ?

Iran ICAO TRIP Seminar (9 to 11 May 2016)

Contact Details

Name: Sjef Broekhaar

Email: sbroekhaar@icao.int

With expression of gratitude to:
Mr. Tom Kinneging
Convenor WG3
ISO