INTERNATIONAL CIVIL AVIATION ORGANIZATION

ICAO Regional Seminar on MRTDs,
Biometrics and Border Security

27 - 29 November 2012

Elephant Hills Resort,
Victoria Falls, Zimbabwe

HOW TO BECOME AN ACTIVE PKD PARTICIPANT: A GUIDED TOUR

Christiane DerMarkar

Programme Officer - PKD

Secretary of the PKD Board

Introduction

The ICAO PKD was created at the request of ICAO Contracting States by the ICAO Council.

The ICAO Recommended Practice in Annex 9:

> *"ICAO Contracting States issuing, or intending to issue ePassports and/or; implementing at border control automated checks on ePassports; should join the ICAO Public Key Directory (PKD)."*

Today, 34 States have joined the PKD, and many more are on their way.

The steps to join the PKD

In order to become a Participant in the ICAO PKD, it is required to do the following:

1. Deposit a Notice of Participation with the Secretary General of ICAO.

2. Deposit a Notice of Registration with the Secretary General of ICAO.

3. Effect payment of the Registration Fee and Annual Fee to ICAO.

4. When ready, securely submit to ICAO and all Participants, the Country Signing CA Certificate (CCSCA).

5. Upload/Download to and from the PKD.

STEP 1
Fill the Notice of Participation

Complete and send to the ICAO Secretary General the Notice of Participation to the PKD Memorandum of Understanding (MoU) with ICAO

1. The official start of the Process of joining the PKD.

2. The Notice of Participation can be found in: Attachment A of the PKD MoU.

3. A Model of the Notice of Participation is available for download at the MRTD Web site. http://www.icao.int/Security/mrtd/Pages/icaoPKD.aspx

4. The Notice of Participation should be filled by the authority in charge of ePassport or identity documents.

http://www.icao.int/Security/mrtd/PKD%20Documents/Forms/AllItems.aspx

1. Select PKD documents

MEMORANDUM OF UNDERSTANDING (MoU)
REGARDING PARTICIPATION AND COST SHARING IN THE
ELECTRONIC MACHINE READABLE TRAVEL DOCUMENTS
ICAO PUBLIC KEY DIRECTORY (PKD)

NOTICE OF PARTICIPATION

The____Ministry of Interior_____
      (name of the Authority designated by the Participant concerned as its authorized organ)

of____Republic of Utopia_____
     (name of Participant)

hereby gives the Secretary General of the International Civil Aviation Organization (ICAO)

notice of participation of_____

Identity and Passport Service Authority
Moon Street no. 123, 54321 Utopia City, Republic of Utopia
_____
(name and address of the Participant)

in the *Memorandum of Understanding (MoU) Regarding Participation and Cost Sharing in the Electronic Machine Readable Travel Documents ICAO Public Key Directory (ICAO PKD)*.

NOTE: Participation by a non-State entity in the ICAO PKD (the functions of which are technical and operational) will not afford such non-State entities the rights or privileges accorded to ICAO Contracting States under the Chicago Convention.

Signed at___Utopia City_____on___13 July 2010_____
           (place)   (date)

                                          Republic of Utopia
On behalf of_____

                                          Ministry of Interior
Name of Authority_____

                          Mr. Dolittle, Head of Division for Documents Law
Name, title_____

Signature_____

STEP 2
Fill the Notice of Registration

Complete and send to the ICAO Secretary General the Notice of Registration

1. The Notice of Registration can be found in: Attachment B of the Procedures of the ICAO PKD.

2. A Model of the Notice of Registration is available for download at the MRTD Website. http://www.icao.int/Security/mrtd/Pages/icaoPKD.aspx

3. The Notice of Registration is important to establish the State Representative contact details: the eMRTD Authority (EMA).

4. The Notice of Registration permits the State to register with the Operator.

http://www.icao.int/Security/mrtd/Pages/icaoPKD.aspx

1. Select PKD documents

MODEL
NOTICE OF REGISTRATION

REGISTRATION FOR PARTICIPATION IN ICAO PKD	
PASSPORT DATA	
Estimated number of Document Signer Certificates that will be issued each year:	12
Estimated number of Certificate Revocation Lists that will be issued each year:	8
Number of expired and valid Country Signing CA Certificates:	3
Number of expired and valid Country Signing CA Link Certificates:	2
Average validity period for Country Signing CA (Link) Certificates:	10 years
Estimated number of Master Lists issued each year:	12
Estimated number of entries per Master List:	50

eMRTD AUTHORITY (EMA) DETAILS

Name:	Mr. Dolittle, Ministry of Interior
Title:	Head of Division for Documents Law
Address:	Moon Street no. 111, 55555 Utopia City, Republic of Utopia
Telephone:	+333-222-1111 9999
Fax:	+333-222-1111 8888
E-Mail:	Doc@MoI.gov.uto
Designation (eMRTD System):	chief ePassports and ID-cards adviser
Senior Officer (eMRTD System):	Mr. Domuch, Ministry of Interior, CIO

eMRTD COUNTRY SIGNING CERTIFICATE AUTHORITY (CSCA)

Name:	Mr. Dosomething, Identity and Passport Service Authority
Title:	Senior PKI Officer
Address:	Moon Street no. 123, 54321 Utopia City, Republic of Utopia
Telephone:	+333-222-2222 9999
Fax:	+333-222-2222 7777
E-Mail:	CSCA@ema.gov.uto
Designation (eMRTD System):	Head of N-PKD

Payment of Fees: Registration Fee

1. A Onetime fee : US $56,000.

2. To prepare activity in the PKD and the technical integration of a new PKD Participant.

3. Is payable to ICAO upon filing of the Notice of Participation.

4. Full payment is mandatory for participation in the PKD to become effective.

5. Once Registration Fee is paid and the participation is effective, the Participant receives 2 documents:
   - ❖ the Interface Specifications: detailing the protocol for accessing the PKD
   - ❖ the Test Bench procedures: detailing the testing procedure for the access to the PKD

STEP 3
Payment of Fees: Annual Fee

1. On the first year of participation calculated on a pro-rata basis from the day when PKD participation becomes effective.

2. Recurring Fee to cover running costs of participation.

3. For an active Participant the Annual Fee is around US $58,900 in 2013:

    a) ICAO Fees: US $15,900/year (2013 based upon 33 participants).

    b) The Operator Fees: US $43,000/year. Effective <u>1 January 2014</u> will be <u>US $34,000</u>

4. ICAO Fees has decreased by 50% since 2009 and more to come.

5. Not paying the Annual Fee: withdrawal of services.

Step 4
ACCESS the PKD

1. **Every new Participant is given two documents:**

   ❑ **Interface Specifications document - the protocol for accessing the PKD.**

   ❑ **Testbench procedures document - the testing procedures for the access to the PKD.**

2. **The Participant is expected to fill out Appendix A of the testbench procedures and send it to Netrust.**

3. **The Appendix A contains the following details:**

   ❑ **Details of the technical contact for the Participant.**

   ❑ **Details of the upload officers for the Participant.**

   ❑ **List of email recipients for the notification emails sent by the PKD.**

   ❑ **The complete address of the E-MRTD authority for the Participant.**

   ❑ **A Certificate Signing Request (CSR) for the access credentials to the test environment**

Step 4
ACCESS the PKD – cont.

1. The Appendix A must be signed and stamped by the same signatory as the MOU

2. After the Participant has completed testing the PKD interface, they are ready for connection to live PKD

3. The following steps need to be taken: Import the CSCA

Step 5
CSCA IMPORT

1. **The Participant needs to send a copy of their CSCA certificate, one DSC and one CRL to Netrust for testing compliance to Doc 9303.**

2. **Netrust will test the certificates and issue a confirmation to ICAO allowing for the import of the CSCA into the HSM in Montreal.**

3. **Once validated, the Participants informs ICAO of an intended date of import and sends the thumbprint of the CSCA by email to the PKD officer.**

4. **Send the credentials of the Representative attending the Import ceremony: Passport # and Identity Details.**

5. **In the presence of the State Representative and ICAO Security Officers, the CSCA is imported in the High Secure Module (HSM):**

   the anchor of trust for the PKD.

Step 5
CSCA IMPORT:
Conformance with Doc 9303

Step 5
CSCA IMPORT

1. Once the CSCA is imported, the Participant needs to generate another CSR and send it to Netrust for creating the access credentials to the live environment.

2. At this point the Participant can start uploading/downloading from the PKD.

Active Participation PKD Integration / Upload

1. **A PKD Participant should start active Participation (PKD Upload) at the latest 15 months after paying The Registration Fee and becoming Effective participants.**

2. **Participant are required to have completed the testing of the PKD interface and successfully imported the CSCA into the HSM in Montreal.**

3. **The PKI Infrastructure between National and Central PKD should be implemented.**

4. **Full conformity to Doc 9303 is required.**

Summary

1. Establish who will be the authority responsible for PKD.

2. Establish a permanent budgetary line.

3. Conformance with Doc 9303 is essential.

4. Follow the steps described and become active within 15 months.

5. Contact ICAO, the PKD Board Chairman or any PKD Board member for additional questions.

Come and Join!!!

THANK YOU

Christiane DerMarkar,

Programme Officer – PKD

Secretary of the PKD Board

cdermarkar@icao.int

http://www.icao.int/Security/mrtd/Pages/icaoPKD.aspx