



INTERNATIONAL CIVIL AVIATION ORGANIZATION



الهيئة العامة للطيران المدني  
CIVIL AVIATION AUTHORITY

## ICAO Regional Seminar on MRTDs, Biometrics and Border Security

دوندوة الايكاو الإقليمية عن وثائق السفر المقروءة آلياً، والأدوات البيومترية وأمن الحدود  
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٣١ أكتوبر إلى ٢ نوفمبر ٢٠١١



# *HOW TO BECOME AN ACTIVE PKD PARTICIPANT: A GUIDED TOUR*

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



# Overview



- **How to join the PKD: Pertinent Documents to be filled.**
- **What is effective Participation: Fees payment.**
- **What is Active Participation: PKD testing, Integration and Up/download.**





# 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).**



## 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://www2.icao.int/en/MRTD/Pages/icaoPKD.aspx>**
- 4. The Notice of Participation should be filled by the authority in charge of ePassport or identity documents.**



<http://www2.icao.int/en/MRTD/Pages/Downloads.aspx>

## 1. Select PKD documents and Resources

**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://www2.icao.int/en/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://www2.icao.int/en/MRTD/Pages/Downloads.aspx>

## 1. Select PKD documents and Resources

### MODEL NOTICE OF REGISTRATION

REGISTRATION FOR PARTICIPATION IN ICAO PKD	
<b>PASSPORT DATA</b>	
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
<b>eMRTD AUTHORITY (EMA) DETAILS</b>	
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@Mol.gov.uto
Designation (eMRTD System):	chief ePassports and ID-cards adviser
Senior Officer (eMRTD System):	Mr. Domuch, Ministry of Interior, CIO
<b>eMRTD COUNTRY SIGNING CERTIFICATE AUTHORITY (CSCA)</b>	
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





## STEP 3



# 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 the Interface Specifications and the Test Bench procedures.**



## 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 \$54,000:**
  - a) ICAO Fees: US \$11,000/year (2011 based upon 28 participants).**
  - b) The Operator Fees: US \$43,000/year**
- 4. ICAO Fees has decreased by 50% since 2009.**
- 5. Not paying the Annual Fee: withdrawal of services.**



# Step 4

## CSCA IMPORT



- 1. The eMRTD Authority (EMA) sends the CSCA to Netrust for validation.**
- 2. Once validated, the EMA communicates with ICAO PKD Office to schedule a date for the Import Ceremony.**
- 3. The EMA sends the thumbprint of the CSCA by email to the PKD officer.**
- 4. Send the credentials of the Representative attending the Import ceremony: Passport/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 4

# CSCA IMPORT:

## Conformance with Doc 9303




**Import Results**

Certificate Profile Check (ICAO Doc 9303, Volume 2, Section IV, Normative Appendix 1)

1. Version	✓	7. SubjectPublicKeyInfo	✓
2. SerialNumber	✓	8. IssuerUniqueId	✓
3. Signature	✓	9. SubjectUniqueId	✓
4. Issuer	✓	10. Extension	✓
5. Validity	✓		
6. Subject	✓	<b>OVERALL</b>	✓

Certificate Import Results

 The following Country Signing CA Certificate was imported successfully:

Issuer Name: OU=Identity Services Passport CA,OU=Passports,O=Government of New Zealand,C=NZ

Subject Name: OU=Identity Services Passport CA,OU=Passports,O=Government of New Zealand,C=NZ

Validity: Thu Jun 30 03:30:23 BST 2011 to Thu Jan 30 03:00:23 GMT 2020

Imported in the Presence of: Peter Campbell



# Step 4

## CSCA IMPORT







# 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 be familiar with the PKD Test Bench Procedures and the PKD Interface Specifications before starting the PKD testing and Integration.**
- 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.**
- 5. Contact ICAO, the PKD Board Chairman or any PKD Board member for additional questions.**



# Come and Join!!!







*Thank you  
for your attention*

Christiane DerMarkar,  
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Secretary of the PKD Board  
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<http://www2.icao.int/en/MRTD/Pages/icaoPKD.aspx>