



# ICAO Public Key Directory (PKD) How to join

Christiane DerMarkar

PKD Officer



Strengthening Aviation Security through Improved Traveller Identification





## It's not complicated: All you have to do is....

- Find out who is responsible
- Check legislation and budget
- Different organizations in different states (try to make it as simple as possible)
- Contact ICAO or any PKD Board Member or PKD Participant if you have questions





### Steps to join the PKD

- 1. Deposit a Notice of Participation and Notice of Registration with the Secretary General of ICAO
- 2. Once the signed Notice of Participation is received by ICAO, the officer designated by the State will receive a Registration Fee invoice of US \$15,900.00
- 3. The payment of the Registration Fee to ICAO is necessary in order to become a PKD participant.
- 4. Securely submit to ICAO and all Participants, the CSCA certificate
- 5. Use the PKD : upload/Download certificates
- 6. <a href="http://www.icao.int/Security/FAL/PKD/Pages/How-to-Participate.aspx">http://www.icao.int/Security/FAL/PKD/Pages/How-to-Participate.aspx</a>



#### CAO SECURITY & FACILITATION

http://www.icao.int/Security/FAL/PKD/Doc uments/PKDMoU(includeslanguageversion( s))/NoticeofParticipation-Model.pdf

#### 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

	Mini	stry of Interior	
The	Authority designated by th	e Participant concerne	d as its authorized organ)
(name of the	e Authority designated by th	e Farncipani concerned	a as us aumorizea organ)
	Repu	ıblic of Utopia	
of	(name	of Participant)	
hereby gives th	e Secretary General of the l	nternational Civil Avia	tion Organization (ICAO)
notice of partic	ipation of		
	Identity and Pa Moon Street no. 123, 543	ssport Service Authorit 21 Utopia City, Republi	
	(name and add	dress of the Participant)	
the Electronic PKD).  NOTE: Partici technical and	Machine Readable Trave	ty in the ICAO PKD of such non-State entit	ipation and Cost Sharing in ablic Key Directory (ICAO) (the functions of which are ies the rights or privileges
Signed at	Utopia City	on	13 July 2010
Signed at	(place)		(date)
	On behalf of		Republic of Utopia
	Name of Authority		Ministry of Interior
	Name, title		Division for Documents Law
	Signature	Q.	little
	Signature		



#### ICAO SECURITY & FACILITATION

http://www.icao.int/Security/FAL/PKD/Documents/PKDMoU(includeslanguageversion(s))/NoticeofRegistration-Model.pdf

#### 1. Select PKD documents

#### MODEL NOTICE OF REGISTRATION

REGISTRATION FOR PARTICIPATION IN ICAO PKD				
PASSPORT DATA				
Estimated number of Document Si	gner Certificates that will be issued each year: 12			
Estimated number of Certificate R	evocation Lists that will be issued each year: 8			
Number of expired and valid Cour	ntry Signing CA Certificates: 3			
Number of expired and valid Country Signing CA Link Certificates:				
Average validity period for Country Signing CA (Link) Certificates: 10 years				
Estimated number of Master Lists issued each year:				
Estimated number of entries per Master List:				
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 995       Fax:     +333-222-1111 888       E-Mail:     Doc@Mol.gov.ut				
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)				
Title:	e: Senior PKI Officer			
Telephone: Fax: E-Mail:	+333-222-2222 9999 +333-222-2222 7777 CSCA@ema.gov.uto			
Designation (eMRTD System):	Head of N-PKD			





#### 01.01.2016: Fees reduction

- Registration Fee: US \$15,900
- 2017 Annual Fees based on 54 Participants: US \$ 37,300
- C. More Participants = reduction in Operators and ICAO Annual Fees



Active Participants	Operator and ICAO Fees
50 Participants	37,000.00 US\$
55 Participants	34,500.00 US\$
60 Participants	32,500.00 US\$
65 Participants	30,900.00 US\$



# Active Participation PKD Integration

- A PKD Participant should start active Participation (CSCA Import and 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. Full conformity to Doc 9303 is required.



# SECURITY & FACILITATION NO COUNTRY LEFT BEHIND Becoming Active



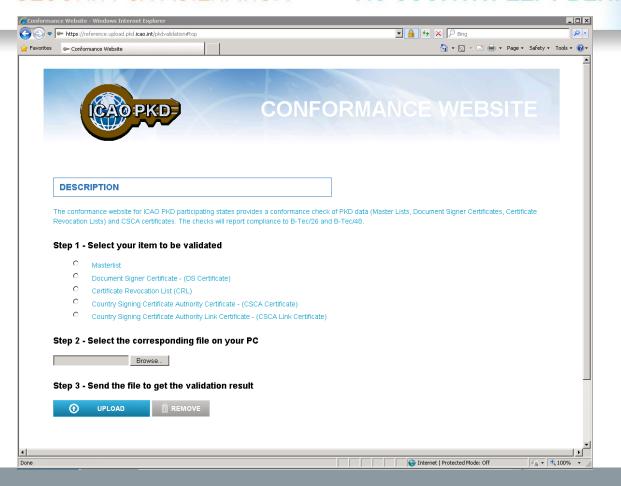
- 1. Every new Participant is given two documents:
  - Interface Specifications document the protocol for accessing the PKD.
  - PKD Pre-Production Environment Procedures
- 2. The Participant is required to be familiar with both documents before starting the PKD testing and integration.
- 3. The pre-production system is available for all participants in order to:
  - ☐ Test the interface between their national infrastructure and the ICAO PKD System
  - ☐ Test their PKD Data prior to the upload to the ICAO PKD Production System
  - ☐ Check conformance of the PKD Data against the PKD Upload Conformance Checks
- 4. Website for Conformance Checks: allows for checking the certificates before they are imported or uploaded to the PKD actual LDAP upload.
- 5. The website can be accessed via the following URL, using certificate-based authentication with an upload certificate: <a href="https://reference.upload.pkd.icao.int">https://reference.upload.pkd.icao.int</a>



#### ICAO SECURITY & FACILITATION

#### NO COUNTRY LEFT BEHIND







## CAO SECURITY & FACILITATION NO COUNTRY LEFT BEHIND



### **CSCA IMPORT**

- The Participant should check the CSCA certificate to be imported by the means of the ICAO PKD conformance website (https://reference.upload.pkd.icao.int/)
- In case of issues with the certificate the participant should contact the PKD support of Veridos (pkdsupport@verdios.com) for assistance.
- If conformance is confirmed, the PKD Participant will submit its CSCA certificate along with the electronic thumbprint to ICAO by electronic means for registering the key ceremony.
- The credentials of the PKD Participant representative will need to be submitted: Passport # and Identity Details
- 5. A date will for the import will be fixed
- On the date of the import: In the presence of the State Representative and ICAO Security 6. Officers, the CSCA is imported in the High Secure Module (HSM): the anchor of trust for the PKD.
- A protocol of the Import will be signed by both the PKD participant Representative and ICAO confirming that the Anchor of Trust has been imported into the PKD HSM



#### ICAO SECURITY & FACILITATION

#### NO COUNTRY LEFT BEHIND



## **CSCA IMPORT** Protocol





#### Protocol for

#### Key Ceremony with Representative

CO Participant 351 Key Ceremony ID

Created by Helen Manentis

Oct 26, 2016 2:00:10 PM Created at

Representative

Sex MALE

Representative of Colombia on the Council of Title

Alberto Munoz Gomez Full Name

Date of Birth 04/11/1959

E-Mail

ID Type Passport ID Number DP046143 Jun 15, 2020 **ID Expiration Date** 

**CSCA Certificate** 

3D:47:9E:80:BE:C0:54:BF:13:19:C9:18:49:A4:7 Fingerprint

B:AA:D4:7C:E6:80 CN=Government of Colombia

Certificate ID CSCA, OU=Certification

Authorities, O=Colombia, C=CO / 55770B5A

PKD Operator Helen Manentis Oct 27, 2016 8:55:03 PM Imported at

PKD Officer Christiane DerMarkar Oct 27, 2016 8:57:18 PM Imported at







## **Contact Details**

Name: Christiane DerMarkar Email: cdermarkar@icao.int