

TECHNICAL ADVISORY GROUP ON MACHINE READABLE TRAVEL DOCUMENTS (TAG-MRTD)

NINETEENTH MEETING

Montréal, 7 to 9 December 2009

Agenda Item 4: Implementation of the Public Key Directory
Agenda Item 4.1: Recent Developments of the Public Key Directory

RECENT DEVELOPMENTS OF THE PUBLIC KEY DIRECTORY (PKD)

(Presented by the Public Key Directory (PKD) Board)

1. **INTRODUCTION**

- 1.1 The ICAO Public Key Directory (PKD) has been established as a world wide accessible system that acts as the central broker to manage the exchange of certificates and certificate revocation lists that are necessary to validate ePassports. This central role is critical to minimise the volume of certificates and certificate revocation lists being exchanged, to ensure timely uploads and to manage adherence to technical standards. The PKD is therefore a key factor to achieve and maintain ePassport global interoperability.
- 1.2 The exchange of certificates and certificate revocation lists must be reliable and timely. This exchange cannot be achieved by other than electronic means. The facilitation of ePassport validation with the PKD operates on an open ended, indefinite basis.

2. **STATE OF PLAY**

- 2.1 Since the 18th meeting of the TAG-MRTD in May 2008 important steps have been taken to consolidate the PKD. The following aspects are highlighted.
- 2.2 The PKD Memorandum of Understanding was updated end of 2008 to allow for the introduction of Master Lists and CSCA Link Certificates as a major improvement of the PKD contents. In addition a reduction of the Registration Fee from 85 to 56,000 US \$ could be agreed as an incentive for prospective PKD Participants.
- 2.3 The operation of the PKD in 2008 continued to be based on preliminary agreements as the scrutiny of alternative models for covering the PKD operational costs turned

out to be more difficult than originally foreseen. However, the PKD Board succeeded in clarifying all open questions and finally an operational contract between ICAO and the PKD Operator Netrust was signed before end of 2008. The new operational contract covers the years 2009 through 2011. It is accompanied by a reordering of the financial conditions for participation in the PKD. The principle of shared burden for ICAO costs and individual Netrust costs per PKD Participant was implemented including a mechanism to reduce fees if participation grows.

- 2.4 Since the 18th meeting of the TAG-MRTD in May 2008 the following new PKD Participants signed the MoU: France, China, Kazakhstan, India, Nigeria, Switzerland and Ukraine. Today there are 16 PKD Participants and the PKD enjoys growing international support.
- 2.5 To give an example the European Union Member States and the associated Schengen States work towards a common approach for participating in the PKD. There is a good chance that within a medium time frame the number of PKD Participants at least doubles and reaches more than forty. By this the still existing gap between the number of ePassport issuing countries and the number of PKD Participants would largely be filled. The future perspective and natural consequence of ePassport issuance and application will be participation in the PKD.
- Now one year after the ICAO Council endorsed the MoU change for the Master Lists and CSCA Link Certificates these new PKD contents categories are implemented. CSCA Link Certificates are an essential contribution to the facilitation of certificate exchange between PKD Participants and ICAO. Once the manual first secure import of a CSCA Certificate of a PKD Participant is carried out in Montreal all subsequent exchanges with ICAO can be done using electronic means only. In addition all users may profit from the Master Lists as signed lists of CSCA Certificates of the PKD Participants. With Master Lists the diplomatic exchange of CSCA Certificates can be reduced significantly.
- 2.7 The administrative work of the PKD Board resulted in five meetings since the 18th meeting of the TAG-MRTD in May 2008. The regular day to day business of the PKD Board together with the meetings underline that there is a successful administrative, financial and technical regime that ensures the smooth operation of the PKD as required by the MoU. In order to preserve the ability to act as participation grows the PKD Board decided to keep the number of PKD Board Members who are allowed to vote at fifteen. This does not mean a disadvantage for PKD Participants not represented by Members as the principle of rotation and equal geographic representation applies in case an ICAO Council appointment for a Member expires and the new composition of the PKD Board is determined.
- 2.8 The 5th ICAO MRTD Symposium and Exhibition in Montreal in October 2009 once again documented the growing awareness and interest in the PKD. The PKD Workshop organised by the PKD Board as part of the Symposium attracted about 200 experts from all over the world to receive the latest information about the PKD and to share views and experiences with PKD Board representatives.

3. **CONCLUSION**

3.1 The TAG-MRTD is invited to note the state of play of the PKD.