**DIRECTORS GENERAL OF CIVIL AVIATION-MIDDLE EAST REGION
FIFTH MEETING (DGCA-MID/5)**

*(Kuwait, 4-6 November 2019)*

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**Agenda Item 6:**　　　　　**Aviation Security and Facilitation**

RECENT DEVELOPMENTS IN FACILITATION PROGRAMMES

*(Presented by the Secretariat)*

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**SUMMARY**

Air transport facilitation is, among others, the efficient management of border control processes to expedite clearance of aircraft, passengers/crew, baggage and cargo; and in order to prevent unnecessary delays so as to maintain both the security and the efficiency of air transport operations. This working paper highlights the recent developments of the three facilitation programmes in the Middle East Region and the proposed next steps in line with both Amendment 26 of Annex 9 – *Facilitation*, the revised roadmap for the ICAO Traveller Identification Programme (ICAO TRIP) strategy, as well as the ICAO Public Key Directory (PKD).

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**1.　　INTRODUCTION**

1.1　　　Since the fourth meeting of the DGCA in Muscat in October 2017, the three Facilitation Programmes have recorded important milestones highlighting ICAO's leadership in setting the standards leading to a more efficient and secure border management control.

**2.　　ANNEX 9 – *FACILITATION* RECENT DEVELOPMENTS**

2.1　　　The tenth meeting of the Facilitation (FAL) Panel (FALP/10), held at ICAO Headquarters in Montréal, from 10 to 13 September 2018, resulted in recommendations (some with relevance for border security management) for substantive amendments to Annex 9 ― *Facilitation*. The final report and other documentation of the meeting can be found on the FALP/10 website at: http://www.icao.int/Meetings/FALP/Pages/FALP10-2018.aspx. The Panel made several recommendations related notably to passenger data exchange and dual nationality. The Panel also recommended consideration of the development of proposals for Standards and Recommended Practices (SARPS) on the collection, use, processing and protection of passenger name record (PNR) data in line with United Nations Security Council (UNSC) resolution 2396 (2017).

2.2　　　During its 216th Session, the Air Transport Committee (ATC) endorsed FALP/10 proposals for amendments to Annex 9 (AT-SD 216/1 refers). During its 217th Session, the Council adopted Amendment 27 to Annex 9 – *Facilitation* (C-DEC 217/3 refers). Amendment 27 to Annex 9 is anticipated to become effective on 21 October 2019 and to become applicable on 21 February 2020.

2.3        The completion of the Annex 9 compliance checklists (CC) in the Electronic Filing Of Differences (EFOD) system is important, being the primary method to gauge States' compliance with Annex 9 SARPs and enables the ICAO Council to determine if further action should be taken in this regard. Therefore, MID States should ensure that the Annex 9 CC is duly completed as stipulated in State letter EC 6/3–18/55, dated 2 May 2018.

2.4        As part of the ICAO Universal Security Audit Programme–Continuous Monitoring Approach (USAP-CMA), the Annex 9 provisions that support both border management and security objectives are audited. Since February 2018, the effective date of Amendment 26, two new Standards, namely 9.5 and 9.6 related to Advance Passenger Information (API) system implementation and its regulatory framework, are audited. Appendix A presents the results for MID States of the eleven ICAO Traveller Identification Programme (TRIP)-related Annex 9 Standards audited in the USAP-CMA.

2.5        Under agenda item 14, Facilitation Programmes, the 40th Session of the ICAO Assembly (24 September – 4 October 2019) adopted an updated resolution on a consolidated statement of continuing ICAO policies related to facilitation (A40-xx) that, as is normally the case, addressed matters relating to the three FAL Programmes, i.e., Annex 9, the ICAO TRIP strategy and the ICAO Public Key Directory (PKD). Two additional resolutions were adopted under the purview of Annex 9, namely, an updated resolution relating to disinsection and vector control methods (A40-xx), and a new resolution on human trafficking (A40-xx). Other issues addressed under Annex 9 were assistance to aircraft accident victims and their families and persons with disabilities/accessibility in aviation.

**3.        IMPLEMENTATION STATUS OF THE ICAO TRIP STRATEGY**

3.1        To assist Member States, an ICAO TRIP implementation roadmap for each of the five TRIP elements, was developed by the Secretariat and approved by the ATC (AT-SD 210/1, refers), with the understanding that the roadmap should impose no obligation on States beyond the Annex 9 SARPs related to the ICAO    TRIP    Strategy.    In    January    2019,    the    updated    roadmap (https://www.icao.int/Security/FAL/TRIP/Pages/Publications.aspx)    was    endorsed    by    the ATC (AT-SD 216/1 refers) incorporating notably 16 new and/or revised provisions, as shown in Appendix B, introduced by Amendment 26 of Annex 9 related to the ICAO TRIP Strategy.

3.2        Building on longstanding ICAO leadership on matters related to Machine Readable Travel Documents (MRTDs), the roadmap provides guidance on the entities responsible at the national level, for the implementation of the ICAO TRIP Strategy, through a National Air Transport Facilitation (NATF) Committee. In this regard, it is mandatory for States to establish an NATF Programme and associated Committees in accordance with relevant Annex 9 provisions. The related guidance can be found in Doc 10042, *Model for a National Air Transport Facilitation Programme*.

3.3        Before issuing an eMRTD, States have to ensure that there is a credible evidence of identity of the citizen requesting it, which involves the tracing, linkage and verification of identity against breeder documents to ensure the authenticity of the claimed identity. Furthermore, issuance of any MRTD should be done in compliance with the Doc 9303, *Machine Readable Travel Documents* specifications in order to enable full MRTD interoperability. Regarding some of the TRIP Interoperable Applications, as of today, 67 Member States, including seven (7) MID States have implemented an API system while only 27 States, including four (4) MID States, have implemented a PNR data system (Appendix C refers). As per Annex 9 Standard 3.10, States are also required to report stolen, lost and revoked travel documents to the INTERPOL Stolen and Lost Travel Document (SLTD) database.

3.4        A significant body of ICAO guidance material is available for all the elements of the ICAO TRIP Strategy at https://www.icao.int/Security/FAL/TRIP/Pages/Publications.aspx. In support of the implementation of the Annex 9 Standard 3.12 related to Machine Readable Convention Travel Documents (MRCTD), the revised version of the joint guidelines developed by ICAO and the UN High Commissioner for Refugees (UNHCR) is available at https://www.refworld.org/docid/52b166a34.html.

3.5         Since 2017, the ICAO Training Package (ITP) "Control of the Authenticity and validity of Travel Documents at Airport borders'', was delivered to 130 trainees from 12 States including 21 trainees from the MID region. This ITP aims at consolidating the competencies of front-line inspection officers from border control authorities in examining travel documents effectively. States are urged to provide their training needs by answering the State letter EC 6/8-18/100. The same State letter also requested to receive specimen passports to be included in the training material and only five (5) MID States have provided the sought specimens. Each training session requires at least 20 specimens and all States are urged to provide at their earliest convenience specimens of their various types of passports, to enable sufficient samples for training purposes. In support of the implementation of the Annex 9 Standard 3.12 related to Machine Readable Convention Travel Documents (MRCTD), the revised version of the joint guidelines developed by ICAO and the UN High Commissioner for Refugees (UNHCR) is available at https://www.refworld.org/docid/52b166a34.html.

## 4.        EPASSPORTS AND ICAO PUBLIC KEY DIRECTORY (PKD)

4.1         The principal added value of electronic passports (ePassports) vis-à-vis standard Machine Readable Passports (MRPs) lies in the convenient access to biographic and biometric data stored in the electronic chip. Such access makes automation possible, speeding manual border checks and enabling implementation of automated border control (ABC) solutions. The electronic signature applied to the chip assures this security, allowing the receiving authority to confirm the true issuing authority and also ensures that no chip data has been modified post-issuance. Verification of this signature requires the availability of the relevant public keys. The ICAO PKD is a central repository which provides convenient exchange and sharing of these keys.

4.2         As of October 2019, 70 entities participate in the ICAO PKD. Six of these are in the MID region (**Appendix D**). Yet at least ten of the States in the region issue ePassports. By issuing ePassports and not actively sharing one's public keys, a gap is created whereby that nation's documents become more susceptible to forgery while its citizens may be denied access to facilitated travel abroad. At least two MID States have implemented e-gates, meanwhile, while not being members of the ICAO PKD, potentially leaving them in a non-optimal situation in which they lack the certificates necessary for automatically verifying documents of interest electronically.

4.3         Annex 9 Recommended Practices include indications that electronic document issuers should join the ICAO PKD and upload information (3.9.1) while border control authorities should join the ICAO PKD and use the information from the ICAO PKD to validate eMRTDs at border controls (3.9.2).  States utilizing ABC systems should use the information available from the ICAO PKD to validate eMRTDs (3.35.5).

4.4         A40 urged all Member States to join and use the ICAO PKD to validate and authenticate ePassports. Appendix E details in a schematic and simplified way how the links between the issuance and the verification of an ePassport can be done and how its authentication can be confirmed thanks, for instance, to the use of the ICAO PKD. It is noteworthy that issuance of ePassport without ICAO PKD participation denies the States to optimise the benefits and primary purpose of the issuance of such a travel document. The information on how to participate in the ICAO PKD is available at https://www.icao.int/Security/FAL/PKD/Pages/How-to-Participate.aspx.

## 5.        ICAO AND THE UNITED NATIONS AGENDA

5.1         ICAO has continued to actively support UNSC resolutions related to facilitation and border security, notably, 2178 (2014)and 2396 (2017) which address the acute and growing threat posed by foreign terrorist fighters (FTFs). As member of the newly established UN Global Counter-Terrorism Coordination Compact, ICAO actively participated to the 2018 update of the "Madrid Guiding Principles" designed as a practical tool to assist States in stemming the flow of FTFs.

5.2         ICAO continues to collaborate with the United Nations Office for Counter-Terrorism (UNOCT) to strengthen the delivery of counter-terrorism capacity-building assistance. In that context, ICAO is one of the partners of the Countering Terrorist Travel (CT Travel) Programme initiative which is a global capacity-building initiative to support Member States to enhance their detection capacity to curb FTFs mobility by using API and PNR data – making them compliant with the requirements of the UNSC resolutions 2178 (2014) and 2396 (2017).

**6.** **ICAO TRIP EVENTS**

6.1        More than 600 participants from 89 States and 14 international/regional organizations attended the Fifteenth Symposium and Exhibition on the ICAO TRIP, with the key theme of "*Bridging the Physical – Digital Document Divide*" held from 25 to 28 June 2019 in Montréal. It was the opportunity to celebrate the 70th anniversary of Annex 9 – *Facilitation*.

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**RESULTS OF THE ELEVEN ICAO TRIP-RELATED AUDITED STANDARDS FOR THE MID REGION (21 STATES AUDITED UNDER USAP-CMA AS PER SEPTEMBER 2019)**

| ANNEX 9 Standard | PROTOCOL QUESTION | SATISFACTORY STATUS (OUT OF THE 21) |
|---|---|---|
| 8.17 | **FAL 9.001** Has the State established a National Air Transport Facilitation Programme (NATFP) based on the facilitation requirements of the Chicago Convention and of Annex 9 thereto? | 52% |
| 8.19 | **FAL 9.005** Has the State established an NATFC and Airport Facilitation Committees (AFCs) as required, or similar coordinating bodies, for the purpose of coordinating facilitation activities between departments, agencies and other organizations of the State concerned with or responsible for various aspects of international civil aviation, as well as with airport and aircraft operators? | 38% |
| 3.7 | **FAL 9.010** Does the State incorporate security features in its current travel documents and plan to periodically update security features in new versions of its travel documents to guard against their misuse and to facilitate detection of cases where such documents have been unlawfully altered, replicated or issued? | 90% |
| 3.8 | **FAL 9.015** Has the State established controls to safeguard against the theft of its blank travel documents and the misappropriation of newly issued travel documents? | 76% |
| 3.8.1 | **FAL 9.020** Has the State established appropriate controls over the entire travel document application, adjudication and issuance processes to ensure a high level of integrity and security? | 71% |
| 3.10 | **FAL 9.021** Has the State established a policy to promptly report accurate information about stolen, lost, and revoked travel documents, issued by the State, to INTERPOL for inclusion in the SLTD database? | 57% |
| 3.10 | **FAL 9.022** Has the State designated an office or entity as responsible for reporting information about stolen, lost, and revoked travel documents, issued by the State, to INTERPOL? | 57% |
| 3.10 | **FAL 9.023** Has the State developed guidelines for reporting information about stolen, lost, and revoked travel documents to INTERPOL? | 52% |
| 3.10 | **FAL 9.024** Has the State established measures to ensure that accurate information about stolen, lost, and revoked travel documents, issued by the State, is promptly reported to INTERPOL for inclusion in the SLTD database? | 52% |
| 3.11 | **FAL 9.025** Are all passports issued by the State machine readable, in accordance with the specifications of Doc 9303? | 95% |
| 3.12 | **FAL 9.027** Are travel documents for refugees and stateless persons issued by the State (Convention Travel Documents) machine readable, in accordance with the Doc 9303 specifications? | 28% |
| 9.5 | **FAL 9.070** Has the State established an API system? | 38% |
| 9.6 | **FAL 9.073** Has the State ensured that the API system is supported by appropriate legal authority? | 28% |
| 9.8 | **FAL 9.075** Is the API system consistent with internationally recognized standards for API? | 19% |

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**APPENDIX B**

**ICAO Traveller Identification Programme (TRIP) Strategy elements and**

**related Annex 9 SARPs (Total: 64 SARPs)**

**(Amendment 26, 15th Edition, October 2017)**

1.    **Evidence of Identity**: "credible evidence of identity, involving the tracing, linkage and verification of identity against breeder documents to ensure the authenticity of identity."

    **Related Annex 9 SARPs:** NIL            **Total: 0**

*It should be noted that A39–20 provides a framework for "evidence of identity".*

2.    **MRTDs**: "the design and manufacture of standardized MRTDs, including ePassports, that comply with ICAO [Doc 9303] specifications."

    **Related Annex 9 SARPs:** Standards 3.4, 3.11, 3.12, 3.63;

           Recommended Practices 3.9, 3.13, 3.26, 3.64   **Total: 8**

3.    **Document Issuance and Control**: "processes and protocols for document issuance by appropriate authorities to authorized holders, and controls to prevent theft, tampering and loss."

    **Related Annex 9 SARPs:** Standards 3.3, 3.7, 3.8, 3.8.1, 3.11.1, 3.15, 3.16, 3.23, 3.25, 3.62, 3.65, 5.26, 5.27, 5.28, 5.29, 8.44;

           Recommended Practices 3.14, 3.15.1, 3.17, 3.24, 3.63.1, 3.64.1, 3.69, 8.43           **Total: 24**

4.    **Inspection Systems and Tools**: "inspection systems and tools for the efficient and secure reading and verification of MRTDs, including use of the ICAO PKD."

    **Related Annex 9 SARPs:** Recommended Practices 3.9.1, 3.9.2, 3.27   **Total: 3**

5.    **Interoperable Applications** (including API and PNR): "globally interoperable applications and protocols that provide for timely, secure and reliable linkage of MRTDs and their holders to available and relevant data in the course of inspection operations."

    **Related Annex 9 SARPs:** Standards 3.10, 9.5, 9.6, 9.8, 9.9, 9.11, 9.13, 9.22, 9.22.1;

           Recommended Practices 3.10.1, 3.34.4, 3.34.5, 3.34.6, 9.1, 9.2, 9.3, 9.4, 9.7, 9.10, 9.12, 9.14, 9.15, 9.16, 9.17, 9.18, 9.19, 9.20, 9.21, 9.23;
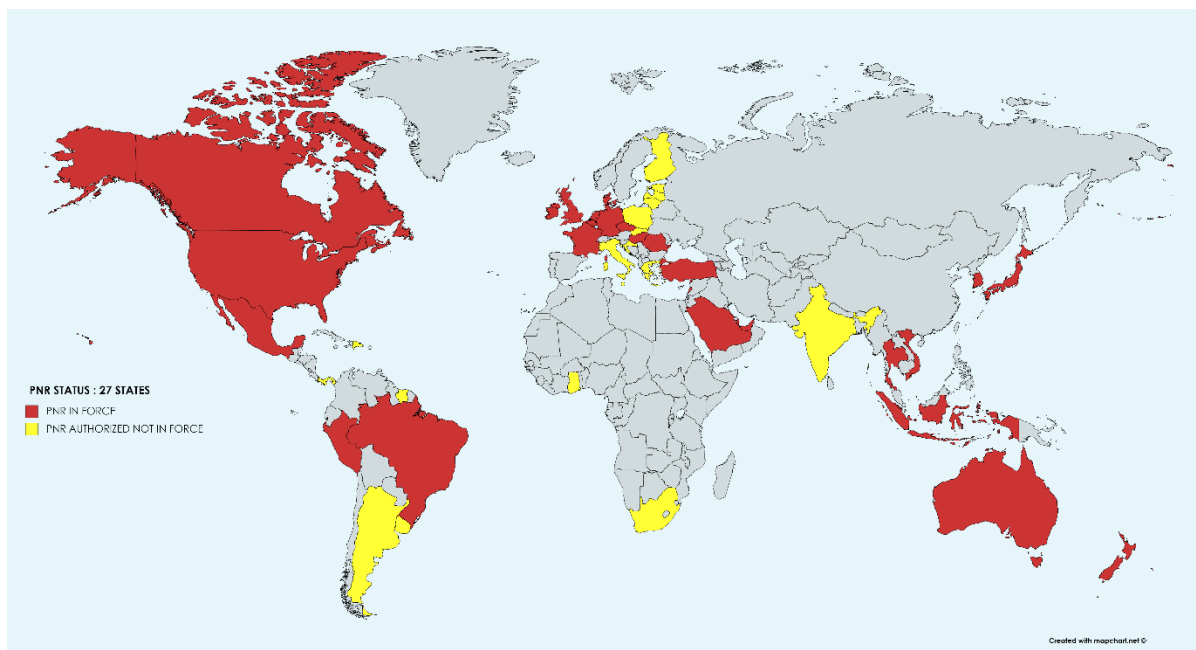
                           **Total: 29**

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**APPENDIX C**

## STATUS OF API AND PNR IMPLEMENTATION BY STATES (as of October 2019)

**API**



**PNR**



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**APPENDIX D**

## ISSUANCE OF ePASSPORTS AND PARTICIPATION TO THE ICAO PKD





## LIST OF MID STATES ISSUING ePASSPORTS
### (As of October 2019)

| Region | Member States |
|---|---|
| **Middle East Office (MID)** | Egypt, Iran (Islamic Republic of), Iraq, Kuwait, Lebanon, Oman, Qatar, Sudan and United Arab Emirates |
| **Total** | **9 out of 15 MID States** |

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## FROM THE ISSUANCE OF AN ePASSPORT TO
## ITS VERIFICATION AT THE BORDERS: THE TRUST CHAIN

### Issuance of an ePassport for a citizen from State A

ICAO PKD

**Repository of the States' Public Keys**

Passport Biographic Data

Passport Photo

Encrypted unique State A Digital signature

State A Private Key

State A Public Key

**Chip**

**Dual keys linked with a unique mathematical link (Algorithm)**

ePassport

**Machine Readable Zone (MRZ)**

**The Chip is locked to prevent any further write operation**
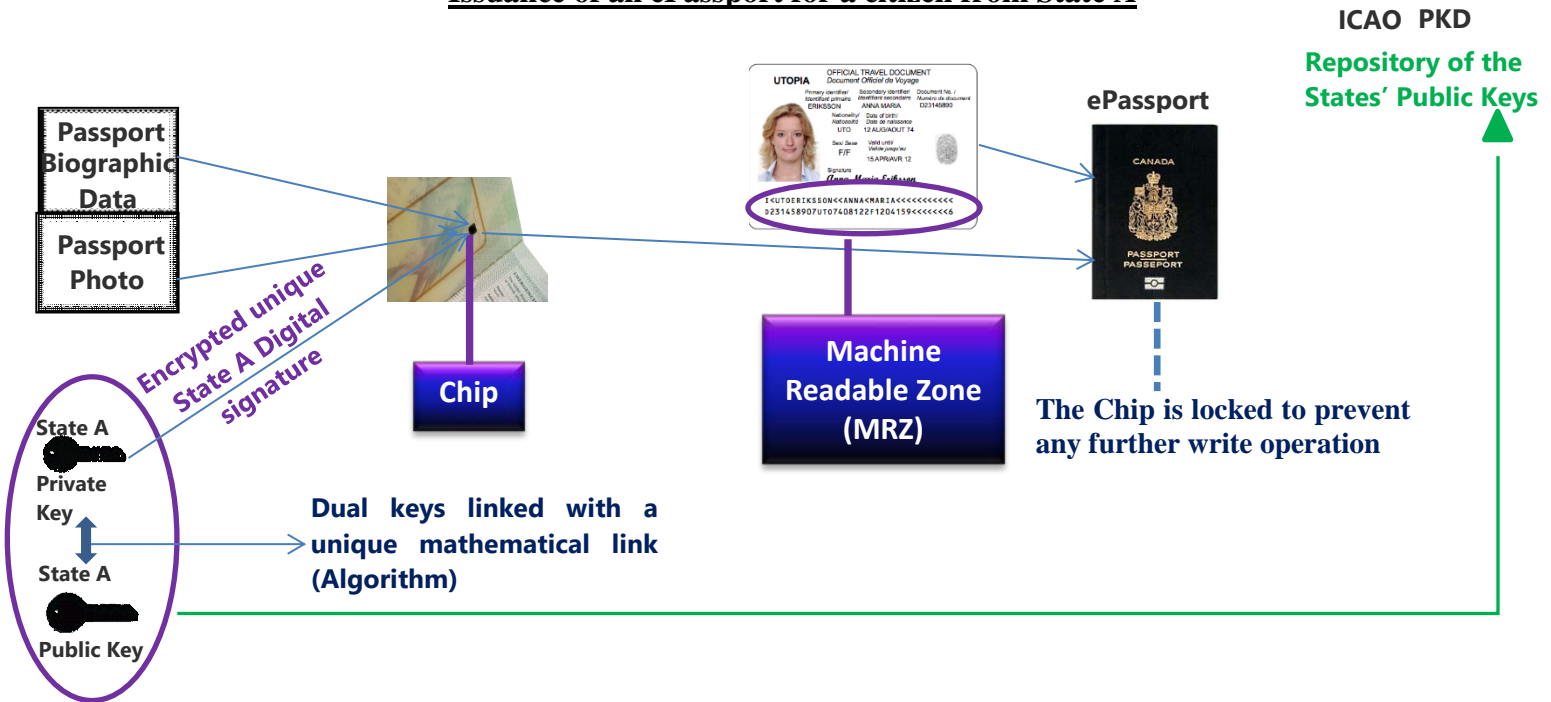
### Checking Steps when the citizen from State A arrives at the State B border

**Step 1**

The MRZ data is simply a representation of some of the printed information on the data page, allowing computers to electronically read the printed information accurately.

The officer scans the passport through a reader to read the MRZ which allows the ePassport chip to be accessed.

The contents of the MRZ contain a key which is used to access the chip and the chip is only allowed to communicate with a reader if the key matches.

If it is the case, the data and photo are retrieved and the checking goes to Step 2.
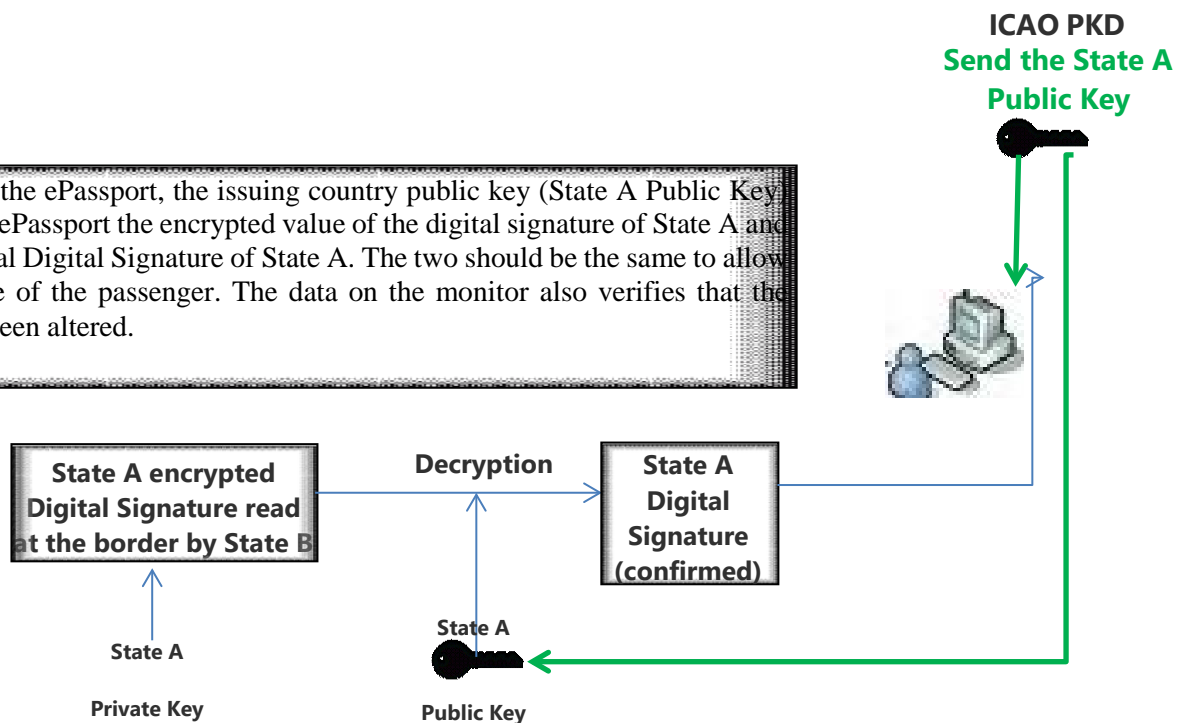
**Step 2**

Monitor

Reader

Border
Crossing
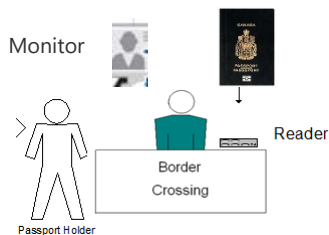
Passport Holder

The chip is opened and the officer checks that the holder matches the photo in the passport as well as the data and the photo in the passport's chip as shown on the monitor. The next step consists in verifying that the passport was issued by a legitimate authority and it has not been altered since its issuance.

**ICAO PKD**
**Send the State A**
**Public Key**

**Step 3**

In order to authenticate the ePassport, the issuing country public key (State A Public Key) is used to decrypt in the ePassport the encrypted value of the digital signature of State A and to compare it to the initial Digital Signature of State A. The two should be the same to allow the successful clearance of the passenger. The data on the monitor also verifies that the passport data have not been altered.

| State A encrypted Digital Signature read at the border by State B | Decryption | State A Digital Signature (confirmed) |
|---|---|---|

State A

**Private Key**

State A

**Public Key**

The role of the ICAO PKD is to validate the authenticity of each State's Public Key otherwise the whole set of data of the ePassport could be counterfeit. This is confirmed through the official import ceremony of each PKD participant Public Key. However the ICAO PKD does not guarantee identity of passport holder as it only guarantees that the data in the ePassport are unchanged since production by a specific producer.

— END —