



ASSEMBLY — 38TH SESSION

EXECUTIVE COMMISSION

Agenda Item 16: Facilitation and Machine Readable Travel Document

**A PROPOSAL FOR ICAO STANDARDS AND RECOMMENDED PRACTICES ON THE AUTOMATED IMMIGRATION CLEARANCE SYSTEM**

(Presented by the Republic of Korea)

**EXECUTIVE SUMMARY**

This paper presents proposals of the Republic of Korea (ROK) for discussions on the revision and addition of new Standards and Recommended Practices (SARPs) for an Automated Immigration Clearance System.

**Action:** The Assembly is invited to:

- a) note the information in this paper; and
- b) request ICAO to consider the proposals set out in paragraph 4.

<i>Strategic Objectives:</i>	This working paper relates to Strategic Objectives B — <i>Security</i> and C — <i>Environmental Protection and Sustainable Development of Air Transport</i> .
<i>Financial implications:</i>	No financial implications
<i>References:</i>	Annex 9 — <i>Facilitation</i> Doc 9303, <i>Machine Readable Travel Documents (MRTDs)</i>

## 1. INTRODUCTION

1.1 At the ICAO 37th Assembly, Member States agreed to promote standardization of facilitation programs in advanced immigration procedures with an aim to enhance security and facilitation. As a part of ICAO's efforts, a Machine Readable Travel Document (MRTD) has been globally realized based on ICAO's Doc 9303.

1.2 In accordance with ICAO's endeavours, Member States have been trying to implement a model of Automated Immigration Clearance System, and the operation results of some States such as the Republic of Korea (ROK) show that the system significantly increases both efficiency and security.

## 2. AUTOMATED IMMIGRATION CLEARANCE SYSTEM OF THE ROK

2.1 As the number of MRTD users increased in the ROK, an Automated Immigration Clearance System based on facial and fingerprint recognition was developed and has been in operation since 2008. It includes a service model using fingerprints and facial recognition; the service model's security system (metal detector) enables simultaneous immigration clearance and security checking based on facial recognition.

2.2 In terms of functional perspective, the ROK system is equipped with automatic departure, arrival, boarding and transfer functions, all designed to make immigration clearance processes more efficient and to prevent the forgery and falsification of passports.

2.3 At first, the biometric method of the old system depended on only fingerprint recognition; however, ICAO Doc 9303 Part I recommends a Facial Recognition System for the additional primary data passport format, while fingerprints and/or iris images may also be stored as secondary biometrics information.

2.4 A new version of the Automated Immigration Clearance System was developed in 2009 that uses facial information in electronic passports without pre-registration. An operation test was completed in 2010 with great success. Currently, 14 additional installations are planned in the ROK.

## 3. EXPECTED EFFECTS OF THE AUTOMATED IMMIGRATION CLEARANCE SYSTEM

3.1 This system has made a remarkable contribution to reducing required processing times for both inbound and outbound passengers. Times have been reduced by 30% compared to existing procedures. The system has also been instrumental in preventing unlawful activity, such as passport swapping.

3.2 Furthermore, the statistical data derived from the ROK Automated Immigration Clearance System demonstrates a passenger time value saving of USD 637 thousand. If used in continuous operation, this would amount to more than USD 1,275 thousand per year.

3.3 Such positive outcomes would be expected in other Member States as well, and the results from each individual State would greatly benefit an integrated global aviation field. It is therefore advisable that Member States take advantage of the Automated Immigration Clearance System, and the Standards and Recommended Practices (SARPs) for the implementation and operation of the system should be established. The continuous efforts of the ROK could be of significant assistance to other Member States, so new SARPs for this system are herein suggested.

#### **4. ACTION BY THE ASSEMBLY**

4.1 The ROK proposes that the Council should be requested consider the revision and addition of new SARPs for an Automated Immigration Clearance System as follows in article 4.2 to 4.6:

4.2 Annex 9, Chapter 1 Definition and General Principles, A. Definitions: An Automated Immigration Clearance System with self-screen stand that processes passenger departure step by step in order to enhance the departure process through e-MRTD with biometric recognition. Facial, fingerprint or any other applicable methods are utilized to prevent unlawful activities such as passport swapping.

4.3 Annex 9, Chapter 1 Definition and General Principles, B. General Principle, 1.4: Member States should manage their airport procedures efficiently through the introduction or development of an Automated Immigration Clearance System.

4.4 Annex 9, Chapter 3 ENTRY AND DEPARTURE OF PERSONS AND THEIR BAGGAGE, 3.47: Recommended Practice - Member States should allocate the proper number of staff to deal with inadmissible passengers and to cover mechanical system errors.

4.5 Annex 9, Chapter 8 OTHER FACILITATION PROVISIONS-G. Establishment of national facilitation programmes-8.17: Member States should manage their airport procedures efficiently through the introduction or development of an Automated Immigration Clearance System.

4.6 Annex 17-2.5 Equipment, research and development-2.5.1: Supplement: An Automated Immigration Clearance System has been developed and operated based on e-MRTD, using biometric recognition tools such as facial and fingerprint identification methods at departure, transfer and boarding gate for air security and facilitation.

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