



International Civil Aviation Organization

A41-WP/142

EX/59

2/8/22

WORKING PAPER

ASSEMBLY — 41ST SESSION

EXECUTIVE COMMITTEE

Agenda Item 13: Facilitation Programmes

TOWARDS FURTHER PROMOTING ONE ID FOR IMPROVED PASSENGER CONVENIENCE AND CONTACTLESS TRAVEL

(Presented by Japan)

EXECUTIVE SUMMARY

A new boarding procedure, “Face Express” (One ID) system, was put into service at both Narita and Haneda International Airports in July 2021. When passengers at airports use the Face Express, they can register their face photo and pass through baggage check-in, security checkpoints and boarding gates with a “face pass” without having to present their boarding pass or passport during airport procedures. This will make the conventional cumbersome boarding procedures smoother in a contactless manner. This working paper presents a proposal on future issues that have emerged from approximately one year of use.

Action: The Assembly is invited to:

- a) call for discussing towards an international standard for the accuracy required for face recognition; and
- b) call for discussing towards the establishment of international rules to allow the Integrated Circuit (IC) chip reading of passports.

<i>Strategic Objectives:</i>	This working paper relates to Strategic Objective <i>Security & Facilitation</i>
<i>Financial implications:</i>	The activities referred to in this working paper will be undertaken subject to available resources.
<i>References:</i>	Annex 9 — <i>Facilitation</i> , 15th Edition Doc 9303, <i>Machine Readable Travel Documents</i> HLCC 2021-WP/237: <i>Report of the facilitation stream to the conference on Agenda Item 8</i>

1. INTRODUCTION

1.1 International Air Transport Association (IATA) has been working on the introduction of automated “fast travel” boarding procedures since 2014. One of the objectives was to simplify and reduce the time required for boarding procedures, including immigration procedures at airports, in order to eliminate congestion due to the growth in global aviation demand prior to the COVID-19 pandemic. The concept of “OneID”, a boarding procedure that utilizes biometrics such as face recognition, was proposed as one of IATA’s activities.

1.2 By automating boarding procedures, airlines and airport operators will be able to save labour and increase productivity and passengers will be able to easily complete tedious procedures and spend their time freely at the airport. In order to enjoy these various benefits, the Japanese version of One ID, Face Express¹, has been in operation at both Narita and Haneda International Airports since July 2021.

1.3 Taking Narita Airport as an example here, the system that realizes Face Express consists of a face recognition infrastructure and four touch points for passengers to operate. The four touch points are Common Use Self Service (CUSS), Common Use Bag Drop (CUBD), Passenger Reconciliation System (PRS) and Auto Boarding Gate (ABG). If you register your passport and face information at the first step of the procedures, and then use the face information to match your own face during the subsequent procedures, you can pass through the check-in, the baggage check-in, the security checkpoint entrance and the boarding gate with a stress-free face pass.

1.4 An even greater benefit is the realization of “non-face-to-face and non-contact”. In order to prevent the spread of COVID-19 infections, it is necessary to reduce person-to-person contact as much as possible. Face recognition technology is also very effective as a measure to prevent infections because it allows the procedure to be carried out without contact. This is a great advantage because even if COVID-19 is contained, there is still the possibility of another pandemic in the future.

1.5 The introduction of face recognition technology as above will not only improve passenger convenience by simplifying procedures, and save labour and increase productivity for airlines and airport companies, but also enable non-face-to-face and contactless travel as a measure against infectious diseases. In view of the fact that many airports around the world have suffered severely from the impact of COVID-19 on airport operations, and the subsequent recent recovery has led some airports to limit the number of airport users due to labour shortages, the face recognition technology can also contribute to the efficiency of airport operations.

1.6 Due to the COVID-19 pandemic, the number of airlines and passengers both at Narita and Haneda airports has not grown much. With the aim of promoting Face Express to more airports in the future, a survey of 21 airports, 5 airlines and 4 vendors worldwide was conducted from January to March of this year to clarify current issues. This working paper will raise future issues identified from this survey.

¹ While the boarding process using face recognition is recognized as One ID in the aviation industry, we have created a new service name and logo, “Face Express”, to provide customers with a more intuitive understanding of the service. It is currently used at both Narita and Haneda airports.

2. ITEMS FOR DISCUSSION

2.1 There is a discussion on what are the appropriate values for an index of “False Reject Rate” and “False Acceptance Rate” as a standard for face recognition accuracy. International Civil Aviation Organization (ICAO) Doc 9303, *Machine Readable Travel Documents* states that each country shall establish a tolerance for the recognition system, but since no guidelines are given, much discussion and time has been devoted to a tolerance when introducing new biometric technologies. Since this matter is related to aviation security, if the tolerance is too low, it becomes a problem. However, by posting a guideline for a minimum tolerance, we may be able to contribute to the promotion of biometrics in each country.

2.2 The current IATA guidelines on rules for passenger consent and personal information management when using biometrics indicate that they should conform to national laws and regulations. In some countries, reading the IC chip in the passport is prohibited, so Face Express cannot be used regardless of the passenger’s intention. It may be possible to allow IC passport data to be read only for the purpose of air transportation, subject to the consent of the passenger.

2.3 When European Union (EU) national airlines use biometrics at Japanese airports, they need to conclude a DPA based on GDPR, and for United States (US) flights, the aviation security procedures with the US government are very complicated and require a lot of effort. While we recognize that these are obviously necessary procedures, we wonder if it could be formatted to simplify the procedures.

3. CONCLUSION

3.1 The introduction of biometric technology using contactless technology into airport procedures will not only help to prevent infectious diseases, but will also make a significant contribution to the efficiency of airport operations. To facilitate this movement, we recommend that the following actions be taken.

3.1.1 Currently, there is no specified accuracy required for face recognition. Without clear standards, discussions would need to be held in each country and airport where face recognition is to be introduced, and the time and effort involved would be a hurdle to their introduction. Discussions should be held at ICAO to establish common standards for each country so that the face recognition technology can be introduced to many countries and airports.

3.1.2 To use face recognition, the passport must be an IC passport. However, even with an IC passport, some passengers may not be able to use face recognition if the readability of the data in the IC chip differs from country to country. It would be necessary to discuss bilaterally, as this matter would be subject to the laws and regulations of the country to which the airline belongs. ICAO should promote discussions on the possibility of reading data only for aircraft use, assuming the passenger’s own consent.

3.1.3 The ICAO Facilitation Panel and other relevant Working Groups should initiate concrete discussions by officials to revise Standards and Recommended Practices (SARPs) in Annex 9 — *Facilitation* or provide guidance materials (including best practices) in Doc 9303 as concrete actions to realize the above.