

**59<sup>th</sup> CONFERENCE OF  
DIRECTORS GENERAL OF CIVIL AVIATION  
ASIA AND PACIFIC REGIONS**

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**AGENDA ITEM 5: AVIATION SECURITY AND  
FACILITATION**

**BENEFITS IN INSTALLATION OF CUTTING-EDGE  
SECURITY EQUIPMENT AT AIRPORTS**

(Presented by the Republic of Korea)

**INFORMATION PAPER**

**SUMMARY**

As interest in introducing cutting-edge security equipment has increased worldwide, Incheon International Airport in Korea is seeking to develop ways to enhance aviation security, increase screening efficiency, and improve passenger convenience by sharing its experience in establishing Smart Security, which is being currently promoted, through strengthening explosives detection at the airport and operating Centralized Image Processing for remote screening.

## **BENEFITS IN INSTALLATION OF CUTTING-EDGE SECURITY EQUIPMENT AT AIRPORTS**

### **1 INTRODUCTION**

1.1 Recently, explosive threats to civil aviation have evolved in various forms, becoming smaller and disguised as household items to evade security screening. As a result, ICAO and Contracting States are increasingly interested in introducing cutting-edge security equipment. In line with global trends, the Republic of Korea shares the best practices and achievements related to the installation of cutting-edge security equipment in Incheon International Airport of Korea, one of the busiest airports in the world to support the enhanced and efficient facilitation and aviation security in the APAC region.

### **2 DISCUSSION**

2.1 The Republic of Korea, to establish "Smart Security" system as part of its efforts to introduce advanced aviation security technology, has been installing advanced Imaging Technology(AIT) Body Scanners, CT X-ray machines equipped with Cabin Baggage-Explosive Detection Systems(CB-EDS) and remote centralized screening Systems.

2.2 The AIT Body Scanners can detect metallic, non-metallic, and other threatening materials, allowing the rapid detection of improvised explosive devices(IEDs) hidden on the body. CT X-ray machines equipped with CB-EDS allow more precise screening of hidden IEDs and liquid explosives in cabin baggage without the need for passengers to open their bags. Additionally, with the remote centralized screening system, screening tasks can be performed in a separate space, enhancing the focus of screeners and reducing screening time, thereby improving the efficiency of screeners operations.

2.3 Installation of state-of-the-art equipment have resulted in an increase of approximately 40% in passenger processing speed compared to the previous system. The increased speed of security screening has allowed for more flexible manpower management by minimizing the need for additional personnel. Furthermore, the detection rate of dangerous items has steadily increased due to precise screening, achieving the dual benefit of enhanced aviation security and improved passenger convenience.

2.4 Confirming the benefits from the best practices in Incheon International Airport through the installation of cutting-edge aviation security equipment to facilitate the screening efficiency and user experience, the Republic of Korea is committed to continuously support the airport operators to expand its innovative moves toward better aviation security not only in its soil but also in the global avenue.

2.5 The Republic of Korea encourages APAC States, aerodrome operators, and industries to share data and information on advanced security equipment operation and cooperate with ICAO to contribute to developing effective directions and policies on new facilitation technologies in the APAC region.

2.6 As part of its efforts to share best practices with ICAO and member States, the Republic of Korea has evolved its annual domestic aviation security seminar that has been held since 2005, into a global aviation security seminar starting in 2024, providing a platform for States and stakeholders to share best practices and discuss aviation security.

2.7 The 2024 Global Aviation Security Seminar, brought together airport operators and stakeholders from the globe, including Changi, Narita, Schiphol, and Hong Kong International Airport, and shared their experiences with advanced equipment and security strategies. Discussions were also highlighted with responses from participants with regard to global instability and emerging technologies

such as artificial intelligence(AI).

2.8 The Republic of Korea invites ICAO and member States to participate in the 2025 Global Aviation Security seminar to be held in in September in Seoul, endeavoring to foster a platform for the candid exchange of global aviation security policies and sharing of best practices.

### **3 ACTION BY THE CONFERENCE**

3.1 The Conference is invited to note the information contained in this paper.

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