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ASSEMBLY — 35TH SESSION

ECONOMIC COMMISSION

Agenda Item 29: Facilitation

IMPLEMENTATION OF AIR TRAVEL BAGGAGE TRACKING AND MONITORING SYSTEM BASED ON RFID

(Presented by the Republic of Korea)

INFORMATION PAPER

SUMMARY

This paper provides information on the plan of the Republic of Korea to implement trial system for air travel baggage tracking and monitoring based on RFID in six domestic airports by the first half of the year 2005.

1. INTRODUCTION

1.1 The Republic of Korea is planning to implement a trial system for air travel baggage tracking and monitoring based on RFID (Radio Frequency Identification) at six of its domestic airports (Gimpo, Busan, Jeju, Daegu, Gwangju, Cheongju) for the purpose of reinforcing aviation security and achieving on-time operation of aircraft.

1.2 The air travel baggage tracking and monitoring system based on RFID applies RFID technology, the core technology for realization of ubiquitous, to aviation for automatic identification and effective control and monitoring of baggage allowing reinforced aviation security and improvement in on-schedule departures.

1.3 Use of these kinds of systems is now spreading throughout the world. Following the 9/11 terrorist incident, the United States established plans to attach RFID tags to all passenger baggage and is already testing this on San Francisco/Seattle/Frankfurt route. In Japan, ANA and JAL started hand-free services in March 2004.

2. AIR BAGGAGE HANDLING STATUS AND PROBLEMS

2.1 At present, air baggage information is being managed by barcodes. Baggage is sorted manually, causing frequent errors in identification and classification of baggage.

2.2 In addition, there are many other problems, such as cross pickups, absence of baggage tracking information, miss loads, requirement of too much time in identifying owners of baggage containing dangerous items.

3. PLAN FOR BUILDING RFID-BASED AIR BAGGAGE TRACKING AND MONITORING SYSTEM

3.1 The Republic of Korea (Korea Airports Corporation: KAC) will lead this project and introduce a trial RFID-based Air Baggage Tracking and Monitoring System at six airports by March 2005, designating Jeju as the departure airport and Gimpo, Busan, Daegu, Gwangju, and Cheongju as the arrival airports. RFID tags will be attached in addition to the printed barcode tags on each baggage and various RFID readers will be installed to identify baggage information.

3.2 If successfully implemented, this system is expected to provide the following services:

a) Passenger information in real time to identify those carrying dangerous items such as guns and drugs in their baggage.

b) Improved security check and baggage repacking procedures.

c) Management and tracking of unattended baggage by comparing passengers actually on board against baggage information.

d) Improved procedures of offloading baggage belonging to persons who are not on board by checking baggage location using portable RFID readers (helping on-time departures).

e) Displaying baggage arrival information (Flight Number and Seat Number) on display panel to prevent cross pickup and relieve congestion at baggage claims.

3.3 Implementation of this system is expected to bring a number of customer service improvements, including reduced costs through fast and accurate baggage handling, enhanced airport reliability, reinforced security inspections, real-time passenger information identification, prevention of missed baggage, and facilitation of checking waiting time for arriving baggage.

4. EXPANSION OF AIR TRAVEL BAGGAGE TRACKING AND MONITORING BASED ON RFID.

4.1 As the society, industries, and national environment of the future are all expected to shift to ubiquitous, the Republic of Korea plans to be a leader in air transportation field by applying the RFID technology to aviation to save costs, enhance reliability, strengthen security monitoring, prevent accidents involving air baggage, and to improve overall services through fast and accurate processing and handling of baggage.

4.2 If the result of this trial is successful, the Republic of Korea will expand this service to other airports with accumulated RFID technology in the future. It may also be applied to the Airport Entry Control system, air cargo/airlines meals service area, and valuable services connected with ground transportation.

5. ACTION BY THE ASSEMBLY

5.1 The Assembly is invited to note the Republic of Korea's strong support for improving essential capability of facilitation and practices recommended by ICAO.

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