
	<p><b><u>International Civil Aviation Organization</u></b></p> <p><b>THE EIGHTH MEETING OF AERONAUTICAL TELECOMMUNICATION NETWORK (ATN) IMPLEMENTATION CO-ORDINATION GROUP OF APANPIRG (ATNICG/8)</b></p> <p>Jakarta, Indonesia, 18 - 21 March 2013</p>	 <p>Ministry Of Transportation Republic of Indonesia</p>
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**Agenda Item 6: Report of IMS/SWIM Sub-Group on regional SWIM implementation objective and IMS roadmap including cost-benefit analyses**

**SWIM PROJECT IN REPUBLIC OF KOREA**

(Presented by Republic of Korea)

**SUMMARY**

This paper presents SWIM project in Republic of Korea.

**1. INTRODUCTION**

1.1 The demands of high safety of aircraft and high capacity in airport have been increased. To achieve the demands, all aeronautical data needs to be expressed using digital format and accessed easily by users to support reliable decision making and finding the methodologies of the air traffic management.

1.2 The Republic of Korea (ROK) has prepared for supporting digital information that secure safety of aircraft and expedite air traffic flow. This information contains aeronautical information such as AIM (Aeronautical Information Management), maps, weather data, traffic flow data, etc.

1.3 SOA (Service Oriented Architecture) type data sharing system is one of effective way to provide the easy accessibility of users and scalability of the system, while the conventional system is based on point-to-point connection and provider oriented system.

1.4 The ROK considers SWIM (System Wide Information Management) as the infrastructure of the system, and has started with the development project of ROK SWIM since 2012.

**2. SWIM DEVELOPMENT PLAN IN REPUBLIC OF KOREA**

**SWIM Deployment Status**

2.1 The ROK started the ROK SWIM project from 2012, and has a five year plan to design, build a prototype of the ROK SWIM, and evaluation of the ROK SWIM prototype. This project is being executed by four universities in ROK, Korea Airports Corporation, and one industry. In addition, many consultant groups were participated.

2.2 In the first phase of deployment, by 2016, the ROK SWIM prototype will be

developed and connected to the aeronautical communication network in ROK. The purpose of the installation is to demonstrate how much the digital data can be accessed and used easily, and how much capacity increases, etc.

2.3 On the next phase during the year 2016 to 2017, the prototype of ROK SWIM will be evaluated in terms of reliability and overall performance of the system.

2.4 For SWIM project, more information sharing is needed with other countries' SWIM projects to maximize SWIM advantages.

**Expected Outcome**

2.5 The ROK SWIM provides interoperability with conventional communication network systems. In the near future the ROK SWIM will increase the safety of the aircraft and capacity of air traffics in airports.

2.6 The effective exchanges of digital information among other countries in Asia, US, or Europe may be provided. The sharing information based on SWIM among the countries will help to increase the safety and reduce flight time effectively globally.

2.7 The ROK will be more contributing to the aviation safety in the world by development of the ROK SWIM.

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