

*International Civil Aviation Organization*



**THE FIRST MEETING OF AERONAUTICAL  
COMMUNICATION SERVICE(ACS)  
IMPLEMENTATION CO-ORDINATION GROUP  
OF APANPIRG (ACSICG/1)**



Seoul, Republic of Korea, 13-16May 2014



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**Agenda Item 7: Report of IMS/SWIM Sub-Group on regional SWIM implementation objective and IMS roadmap including cost-benefit analyses**

**THE STATUS OF SWIM DEVELOPMENT IN THE REPUBLIC OF KOREA**

(Presented by Republic of Korea)

**SUMMARY**

This IP presents SWIM R&D status in the Republic of Korea and introduces the current progress and participation plan of Mini Global test with other states that have already developed the SWIM test-beds and will also complete them in September 2014.

**1. Introduction**

1.1 ICAO has defined the concept of SWIM in order to support increasing requirements of aircraft traffic management and provide service-oriented aeronautical communication services. This is the result of passion to adopt the new concept with easy and efficient system utilizations that world's leading states have researched the problems of complexity and difficulties of the legacy system.

1.2 The Republic of Korea has development plans of aeronautical system upgrades to keep pace with the worldwide technology trend of aeronautical data communications.

**2. Discussion**

2.1 The Republic of Korea has started the SWIM project since late 2012 and planned five year development. For the first year, the requirements of Korean SWIM test bed had been investigated and the structures of the Korean SWIM test bed designed. In the second year, the Korean SWIM test bed is being developed with core functions of SWIM and it will be used for supporting SWIM mini Global test.

2.2 For mini Global test led by FAA in the middle of in September 2014, several conference calls had been held and face-to-face meeting also was conducted from 22 to 24 of April, 2014 at the Singapore Aviation Academy. In the Singapore meeting, in-depth technical contents were discussed, such as Mini Global Partner Connectivity, International Standards Collaboration (FIXM/AIXM/WXXM), SWIM Data Exchange and Governance Rules, Data Flows and Systems Design, Use Case and Scenario Development. etc.

2.3 The Republic of Korea will participate in SWIM mini global test. In the SWIM mini global test, The Republic of Korea wants to observe four scenarios. The first one is pre-flight departure message service for inbound aircrafts, the second one is pre-flight departure message service for outbound aircrafts, the third one is boundary crossing coordination for inbound aircrafts, and the fourth one is boundary crossing coordination for the outbound aircrafts.

2.4 In order to support the above test scenarios, four types of FIXM data such as departure message, flight plan, position reports, and boundary coordination, and two types of AXIM data including e-AIP and x-NOTAM will be utilized.

### **3. Action required by the meeting**

3.1 The ACSICG meeting is invited to notify the following:

- a) recognize the SWIM related activities of the Republic of Korea; and
- b) support the cooperation with other states if it needs in this meeting and the future.

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