



# ICAO

*International Civil Aviation Organization*

**The Ninth Meeting of System Wide Information Management Task Force (SWIM TF/9)**

*Bangkok, Thailand, 14 – 17 May 2024*

Agenda Item 5: Updates on the assigned tasks by task leads/contributors, including progress report and issues

**Overview of MET Scenario (#3)  
for Joint event of SWIM over CRV Demonstration and Surveillance data over SWIM Trial  
(Presented by Republic of Korea)**

## SUMMARY

This paper presents an overview of MET scenario for Joint event of SWIM over CRV Demonstration and Surveillance data over SWIM Trial to be presented by Republic of Korea.

## 1. INTRODUCTION

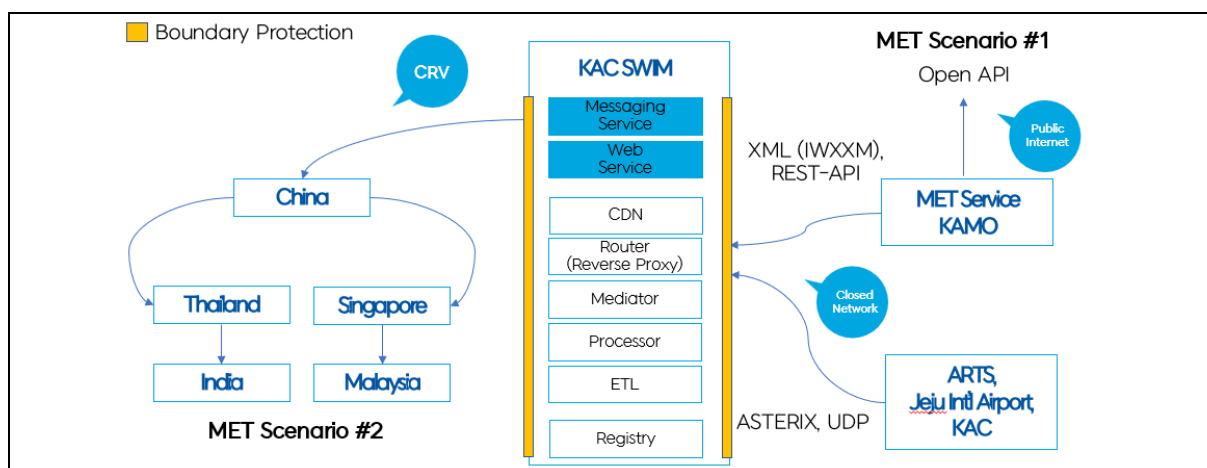
1.1 Joint event of SWIM over CRV Demonstration and Surveillance data over SWIM Trial will be held in 28-29 May 2024. One of scenarios for demonstration is about MET information to be presented by Republic of Korea.

1.2 This paper is intended to allow any participants of SWIM TF who don't attend the offline demonstration to self-try some of the content of the demonstration online.

1.3 This document includes an architecture for demonstration, method to discover a service using SWIM registry and SWIM Discovery Service (SDS), and method to query MET information in IWXXM 2.0/3.0 format using OpenAPI.

## 2. DISCUSSION

2.1 MET scenario consists of scenario 1 and scenario 2. In case of scenario 1, non-demonstration participant is also able to self-try out scenario 1 online.

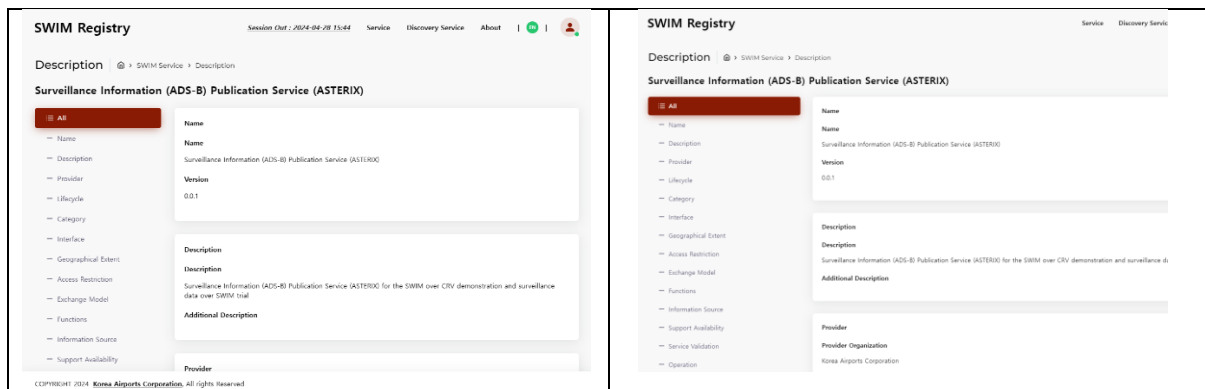


2.2 SWIM services used for demonstration are as follows:

- 2.1.1. (CRV Only) Surveillance Information (ADS-B) Publication Service (ASTERIX);
- 2.1.2. (CRV Only) Surveillance Information (ADS-B) Publication Service (JSON);
- 2.1.3. (CRV Only) Surveillance Information (ADS-B) Publication Service (JSON + FPL);
- 2.1.4. (CRV Only) MET Information Publication Service (IWXXM 2.0);
- 2.1.5. (Public API Only) MET Information Query Service (IWXXM 2.0); and
- 2.1.6. (Public API Only) MET Information Query Service (IWXXM 3.0).

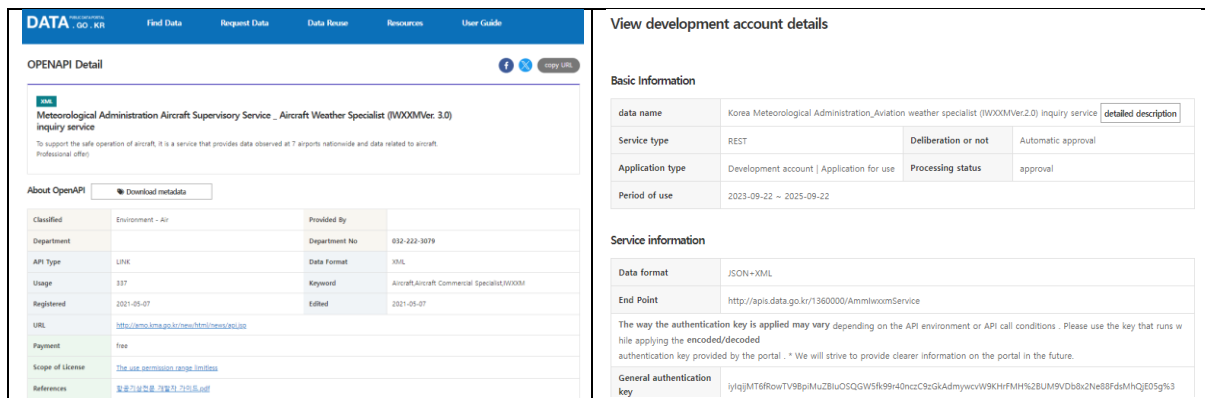
2.2 Service Descriptions of SWIM services mentioned in the 2.1 (i.e., 2.1.1 to 2.1.6) can be discovered using the SWIM Registry as shown in below.

- 2.2.1. [Surveillance Information \(ADS-B\) Publication Service \(ASTERIX\);](#)
- 2.2.2. [Surveillance Information \(ADS-B\) Publication Service \(JSON\);](#)
- 2.2.3. [Surveillance Information \(ADS-B\) Publication Service \(JSON + FPL\);](#)
- 2.2.4. [MET Information Publication Service \(IWXXM 2.0\);](#)



2.3 MET information query services mentioned in the 2.1 (i.e., 2.1.5 and 2.1.6), these services are provided through public internet, and registered in the Public Data Portal managed by the government, and provides service discovery and service description though Public Data Portal as shown in below.

- 2.3.1. [Service Description of MET Information Query Service \(IWXXM 2.0\);](#) and
- 2.3.2. [Service Description of MET Information Query Service \(IWXXM 3.0\).](#)



2.4 Service Descriptions of SWIM services mentioned in the 2.1 are discovered using the KAC SDS instance. Service Descriptions discovered using the KAC SDS instance Service are in JSON format, and it is written in SDM-J as shown in below.

- 2.4.1. Surveillance Information (ADS-B) Publication Service (ASTERIX);  
<http://swim-registry.kr:8001/smxs/services/>"<http://swim-registry.kr/swim-service-description/SIPSA0.0.1>"
- 2.4.2. Surveillance Information (ADS-B) Publication Service (JSON)  
<http://swim-registry.kr:8001/smxs/services/>"<http://swim-registry.kr/swim-service-description/SIPSJ0.0.1>"
- 2.4.3. Surveillance Information (ADS-B) Publication Service (JSON + FPL);  
<http://swim-registry.kr:8001/smxs/services/>"<http://swim-registry.kr/swim-service-description/SIPSJF0.0.1>"
- 2.4.4. MET Information Publication Service (IWXXM 2.0);  
<http://swim-registry.kr:8001/smxs/services/>"<http://swim-registry.kr/swim-service-description/MIPS0.0.1>"

2.5 MET Information Query Services mentioned in the 2.1(i.e., 2.1.5 and 2.1.6), these services are provided through public internet, and openly available as shown in below. In case of MET information query service (IWXXM 3.0), access token is not required, but in case of MET information query service (IWXXM 2.0), access token is required and user ought to follow on-ramping process in the Public Data Portal to get access token.

<p><b>MET information query service (IWXXM 3.0)</b></p>	
<p><b>MET information query service (IWXXM 2.0)</b></p>	

2.6 To query MET information for MET information query services, please click links as shown in below:

- 2.6.1. [METAR / RKSJ \(IWXXM 3.0\);](#)
- 2.6.2. [SIGMET / RKRR \(IWXXM 3.0\);](#)
- 2.6.3. [AIRMET / RKRR \(IWXXM 3.0\);](#)
- 2.6.4. [TAF / RKSJ \(IWXXM 3.0\);](#)

**3. ACTION BY THE MEETING**

3.1 The meeting is invited to:

- a) note the information contained in this paper;
- b) discuss the proposed scenario; and
- c) discuss any relevant matter as appropriate