



ICAO

International Civil Aviation Organization

The Eighth Meeting of System Wide Information Management Task Force (SWIM TF/8)

Bangkok, Thailand, 08 – 10 November 2023

Agenda Item 2: Development of Asia/Pacific Regional SWIM Implementation Guidance

Proposal of Regional Candidate Standard for Service Discovery

(Presented by Governance Task)

SUMMARY

This paper proposes the SWIM Discovery Service (SDS) specification as a candidate standard for the APAC region.

1. INTRODUCTION

1.1 The SWIM Discovery Service (SDS) is a web service that enables the exchange of metadata for a SWIM information service between independently managed SWIM programs.

1.2 The SDS implementation specification v1.0.0 developed by FAA addresses this need by defining a standard mechanism for exchanging service description information, or metadata, between independently managed SWIM programs. It specifies a web services interface, key interaction patterns, schemas, and message exchange formats required to exchange service metadata.

1.3 At the APAC SWIM TF/7, WP/08 - “Proposal of Regional Interoperable SWIM Registry” proposed the SDS implementation specification as the regional specification to enable interoperable service discovery across the APAC region.

1.4 The Meeting noted “the proposed SDS implementation specification document is authored by the FAA. Therefore, a review and a reproduction of the document is required to accommodate the purpose and requirements of the APAC region. After the document is modified to accommodate all key requirements of the APAC region, it can be presented to SWIM TF meeting for adoption as a regional guidance.”

2. DISCUSSION

2.1 As a follow-up to the meeting note described in the section 1.4, discussions have been made in the governance task to define the future direction of the APAC SDS collaborative effort, and key points derived from discussions are as follows:

- Given that APAC SWIM is also part of the ICAO's larger initiative, global aspect for service discovery should be considered rather than a regional scope;
- Fragmentation of specification document, such as simply rebranding the document or adding regional capability of SDS, could impair cross-regional interoperability of SWIM discovery and cause redundant efforts, and the effort to manage the documents also could be increased;

- Efficient collaborative effort for evolving the specification to address its current limitations and future requirements should be focused and conducted in the global manner to meet the 2030 goal, and;
- Several specifications, such as Flight Information Exchange Model (FIXM) specification or Aeronautical Information Exchange Model (AIXM) specification, are treated like Open Source Software (OSS) and widely used in the different SWIM implementations without permissions or concurrences from the original authors or the region, and SDS specification should be treated like FIXM or AIXM specification.

2.2 Results of discussions are as follows:

- requests Information Management Panel (IMP) to consider adopting the SDS as a global standard for globally-interoperable service discovery;
- request FAA to confirm the license agreement of SDS specification document ; *(In case of FIXM, FIXM website describes its copyright and license(OSS BSD), click link to see [FIXM copyright and disclaimer](#));* and
- requests SWIM TF to position the SDS specification as a candidate standard of APAC SWIM for adaptation and keep in the loop for updates to the specification.

Draft Decision XX/XX Proposal of Regional Candidate Standard for Service Discovery	
What: - SWIM TF requests Information Management Panel (IMP) to consider adopting the SDS as a global standard for globally-interoperable service discovery; - SWIM TF request FAA to confirm the license agreement of SDS specification document; and - SWIM TF positions the SDS specification as a candidate standard of APAC SWIM for adaptation and keep in the loop for updates to the specification.	Expected impact: <input type="checkbox"/> Political / Global <input type="checkbox"/> Inter-regional <input type="checkbox"/> Economic <input type="checkbox"/> Environmental <input checked="" type="checkbox"/> Ops/Technical
Why: Coordination with upper panel (i.e., IMP) and their decision is required, and license agreement of specification should be verified by the SWIM TF.	Follow-up: <input type="checkbox"/> Required from States
When: 6-Nov-23	Status: Draft to be adopted by PIRG
Who: <input checked="" type="checkbox"/> Sub groups <input type="checkbox"/> APAC States <input type="checkbox"/> ICAO APAC RO <input type="checkbox"/> ICAO HQ <input type="checkbox"/> Other: XXXX	

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) discuss the content of this working paper;
- b) discuss any relevant matter as appropriate.
