



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

g) Coordination and Promotion

- Task 10: Regional Coordination and SWIM-related Information Sharing

UPDATE ON TASK 10: REGIONAL COORDINATION AND SWIM-RELATED INFORMATION SHARING

(Presented by IATA)

SUMMARY

This paper presents a brief on identified SWIM-related activities being undertaken in Asia & Pacific Region outside of the ongoing direct SWIM discussions and initiatives.

1. INTRODUCTION

1.1 The objective and scope of Task 10 is to identify SWIM related activities (and their interdependencies) in planning or development within other Working Groups (WGs) and Task Forces (TFs). It is to liaise with relevant regional TF/WGs to refine operational and communications requirements, provide guidance to those WG/TFs developing and using SWIM, and influence outcomes from other WGs and TFs that will support successful expansion of SWIM. This involves confirming inclusion on agendas and appropriate discussions ensuing.

1.2 Task 10 was originally set up to connect with activities going on in the MET WGs but expanded to as many other relevant groups in the CNS and ATM domains that we connect with during the ICAO APAC meeting season and other regional meetings.

1.3 The objective is to communicate activities and specific requests of the SWIM TF to other relevant groups, and also to collate information on SWIM activities that may or may not be known or related to other work and report back here. It is also to offer guidance and support to any groups seeking to initiate SWIM-related development but are unsure of what steps to take.

1.4 The scope of the content is drawn from activities since SWIM TF7 & 8 meetings in May and December 2023 but excludes those direct activities of the SWIM TF or related groups which will be reported separately at this meeting (eg: Trial and SWIM over CRV Demonstration, SWIM Trial Implementation Group (S3TIG), and SWIM Pioneer Implementation Group).

1.5 This summary endeavors to report on all activities related to SWIM in APAC but acknowledges there may be some missing (or duplicated). This is not intentional, and any additional input and updates are welcomed.

2. DISCUSSION

2.1 Surveillance Implementation Coordination Group (SURICG8) meeting:

2.1.1 Singapore shared its intention to publish the ADS-B data from the Singapore ADS-B sensor for consumption by approved parties as an ASTERIX-based JSON formatted message similar to the current ADS-B service when the Singapore SWIM is provisioned.

2.2 Aeronautical Information Services – Aeronautical Information Management Implementation Task Force (AAITF/18) meeting:

2.2.1 The meeting was informed of publication by Japan of an AIC announcing the introduction of a Digital NOTAM Service based on the SWIM concept, and was provided with an overview of the service, its current status, and planned launch in Q1 2025. Information was provided on service types for digital NOTAM and AIP, an integrated map view of information on weather, flight operations, and aeronautical information, and progress and challenges.

2.2.2 The meeting discussed how other areas of information exchange in the ATM field, such as ATC and Air Traffic Flow Management (ATFM) data, would require significant bandwidth allocation. The meeting considered the activities conducted in the SWIM in ASEAN Demonstration could potentially provide information on bandwidth used for the exchange of aeronautical information, however, given that initiative was no longer active, the Secretariat would explore other opportunities to study aeronautical information exchange in SWIM.

2.2.3 The meeting considered that there was a need for close coordination with, and participation of AAITF in, the SWIM TF, and for AAITF participants to be active in other ICAO groups.

2.2.4 The meeting endorsed a Draft Decision to update the TOR to revise references to regional guidance and planning documents, and to strengthen activity in preparation for exchange of aeronautical information in a SWIM environment.

2.3 Air Traffic Management Automation System Task Force (ATMAS TF/4) meeting:

2.3.1 An introductory seminar was held prior to the TF meeting, with the objective to promote a better understanding of the future development Air Traffic Management Automation Systems (ATMAS), highlight the importance of GANP and the relevant ASBU blocks such as FF-ICE, SWIM, etc., among other topics.

2.3.2 Singapore provided an Introduction to TBO and FF-ICE, and several States (China, New Zealand, USA, Singapore and Thailand) provided briefs on their FF-ICE validation activities and/or implementation plans.

2.4 Communications/Navigation and Surveillance Sub-Group (CNS SG/27) meeting:

2.4.1 The meeting heard a paper addressing challenges and requirements for supporting future services, including SWIM, in an Internet Protocol Suite (IPS) environment and offered

that guidelines for sensible use of the ATN and the Internet for SWIM information are needed.

- 2.4.2 The Secretariat informed that the appropriate number of EMSs for regional SWIM is being discussed at the SWIM TF. The selection and authorization of EMS within the region will be the next step after the EMS performance requirements are identified.
 - 2.4.3 Following previous discussions between ICAO APAC and HQ on ICAO requirements, HQ informed about the creation of a new inter-panel task force to address IPv6 addressing and other related mutual concerns. This may include the global guidelines for IPv6 dedicated address block for fixed service and A/G mobile service.
 - 2.4.4 US FAA shared their plan to support the distribution of XML based information using AMHS messaging as an interim step towards transition to a SWIM environment. This effort should support the exchange of XML-based messages such as FIXM and IWXXM.
- 2.5 MET SG27 meeting included an IP outlining upcoming changes to the World Area Forecast System (WAFS) data sets and the introduction of a SWIM-compliant version of SADIS and WIFS.
- 2.6 ATM SG meeting was updated by Singapore on the progress of Free Route Operations (FRTO) in the Asia/Pacific Region. With the applicability date for FF-ICE Release 1 services in 2024 and the APAC SWIM TF's expectation of regional implementation of SWIM by 2030, it was proposed that APAC Region consider the implementation of FRTO.
- 2.7 APAC ANSP Committee (AAC) Pathfinder TBO Project:
- 2.7.1 The APAC ANSP Committee was formed in 2023 as a group of ANSPs, and involving CANSO and IATA, to cooperate in the alignment and implementation of regional Air Navigation Services (ANS) initiatives including the ICAO Asia/Pacific Seamless ANS Plan.
 - 2.7.2 A workstream from the AAC was created to define, develop and demonstrate TBO concept, processes, and requirements for implementation in the region.
 - 2.7.3 Led by CAAS under a Letter of Intent (LoI) signed on 23 October 2023 with 10 ANSPs/IOs. The 'kick-off' meeting was held in SIN early April. Several more ANSPs have requested inclusion in the LoI subsequently.
 - 2.7.4 The meeting agreed that to achieve TBO, SWIM is a fundamental piece / component without which info exchange cannot take place. This is followed by FF-ICE and Connected Aircraft as the other key enablers.
 - 2.7.5 A TBO education package is to be developed by Q2/2025 with a target of 2028 for a TBO trial.
- 2.8 Australian FF-ICE/R1 kickoff:
- 2.8.1 Airservices Australia convened an FF-ICE 'kick-off' meeting in February with the intention of bringing together relevant stakeholders in starting to understand what benefits it will provide to both the Airspace Users (AUs) and the Airspace Service Providers (ASPs), and how to unpack the concept at both a regional and State level.

- 2.8.2 Airservices also attended Pathfinder TBO kick-off meeting as observers in further facilitating their understanding of regional development of FF-ICE in supporting the introduction of TBO.
- 2.9 Airline readiness:
- 2.9.1 During April, the twenty IATA member airlines of the ASPAC/NASIA Regional Coordination Group (RCG) met for the bi-annual meeting and were briefed on SWIM activities in this and other regions. Remainder members are then notified through distribution of meeting minutes.
- 2.9.2 The brief included information on SWIM Implementation Pioneer Group (SIPG) activities, developing more IP-based access as opposed to primarily over CRV – will mean better options for airlines to join, this ICAO SWIM Task Force 9 meeting, upcoming ICAO FF-ICE Ad hoc Group and Workshop with Tabletop Exercise (TTX), and EU CP1 regulation that all operational stakeholders in the European ATM Route Network (EATMN), with the exception of airports, must adopt FF-ICE service.
- 2.9.3 Qatar Airways (QR) has held open discussions with several vendors at ATM World 2024 for presentations on software application and provision of datasets in AIXM format. Most applications are naturally orientated to AIS-AIM office usage, so potential customization may be required.
- 2.9.4 QR has also reported that AIS Doha has implementation targets for AIXM datasets of Q4/2024 for AIP and Obstacle Data, Q2/2025 for Airport Mapping and Q4/2025 for Instrument Flight Procedure Data. Digital NOTAMs are already viewable on their AIS website.
- 2.9.5 All member airlines have been encouraged to participate in SWIM trials with their ‘home’ ANSPs to increase their awareness and help them form plans to progress to being SWIM-enabled.
- 2.10 SWIM awareness / educational videos are available from both [ICAO](#) and [IATA](#) via the embedded links.

3. ACTION BY THE MEETING

- 3.1 The meeting is invited to:
- a) note the information contained in this paper; and
 - b) discuss any relevant matter as appropriate
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