

International Civil Aviation Organization

THE SECOND MEETING OF AERONAUTCAL COMMUNICATION SERVICE (ACS) IMPLEMENTATION CO-ORDINATION GROUP OF APANPIRG (ACSICG/2)

Bangkok, Thailand, 20 - 22 May 2015

Agenda Item 7: System Wide Information Management (SWIM)

PREPARING A SWIM SEMINAR IN APAC

(Presented by the Secretariat)

SUMMARY

This paper introduces a Regional Seminar with SWIM in APAC region and discusses the topics, audience, partnerships, expertise and demonstrations possibilities for 2016 Seminar.

1. Introduction

- 1.1 During APANPIRG/25, discussions about ASBU- B1 SWIM gained a new level of maturity through the update made on Mini Global Demonstration on SWIM and Harmonized SWIM activities in Asia Pacific region.
- 1.2 Following an APANPIRG conclusion reached on the subject, mid 2015 to mid-2016 will be a preparatory year to a seminar to be held in 2016 in APAC Region.
- 1.3 The paper proposes a way forward for this preparatory year.

2. Discussion

Mini Global Demonstration on SWIM

2.1 A Mini Global Demonstration on SWIM was presented to the APANPIRG/25 meeting by Australia (Airservices Australia), Japan (JCAB), Republic of Korea (MOLIT), Singapore (CAAS), Thailand (AEROTHAI) and United States (FAA). The Mini Global Demonstration had been working to increase global interoperability and decrease inefficiencies, in support of the goals of the Global Air Navigation Plan (GANP) and the Aviation System Block Upgrades (ASBUs).

- 2.2 The Mini Global team is developing a global harmonization project to demonstrate Flight Object (FO) concepts as well as the Flight Information Interchange Model (FIXM), Weather Information Exchange Model (WXXM), and the Aeronautical Information Exchange Model (AIXM) standards for sharing common standards for the exchange of information within and between air transportation information domains among the so-called National Airspace System (NAS) components and between the NAS and International Air Navigation Service Providers (ANSP).
- 2.3 The APANPIRG/25 meeting supported the initiative in providing pathway towards SWIM and integrated ATM information in accordance to ICAO ASBU Block 1.
- In discussion of the demonstration, there were queries in regard to the need to implement SWIM infrastructure in the global approach. This approach could be in a form of that is logically centralized while physically distributed. Respectively, it was highlighted that interoperability amongst the so-called Enterprise Messaging Services (EMS's) as well as the use of near-real time data would be explored in Mini Global Phase 2. This near-real time data could allow an early opportunity to assess processes, procedures, governances, alternatives, etc. which could lead to operational trial capability. In addition, continuous feedbacks from the Mini Global Demonstration project to the development of standards have proved invaluable. For example, the project quickly provided feedbacks very early on in the process allowing FIXM version 2.0 to version 2.x. The Mini Global project plans to utilize FIXM 3.0 which was to be released shortly to public.

Harmonized SWIM activities in Asia Pacific region

- 2.5 In the same APANPIRG/25 meeting, Japan stressed the importance of harmonized activities to introduce regional SWIM and noted that SWIM was incorporated in GANP/ASBU Blocks 1 and 2, for States and Regions as well as global ATM communities to consider the globally harmonized SWIM implementation in the near future. In addition, Japan also noted that SWIM development should be considered under both technical and operational aspects in Asia/Pacific Region. Further SWIM Concept document or outcomes from SWIM demonstrations would constitute a first stepping stone to establish the necessary governance principles within the region as well as with other regions.
- 2.6 In view of the foregoing and considering the future work programme of APANPIRG on SWIM, the meeting adopted the following Conclusion:

Conclusion APANPIRG 25/43 – Promote understanding of SWIM in APAC Region

That, recognizing SWIM as a building block of ASBU Block 1 and 2 modules, ICAO be invited to promote understanding of SWIM through organizing seminars/workshops with focus on both technical and operational aspects for SWIM development in the Asia Pacific Region.

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Regional Framework for Collaborative ATFM

- 2.7 The Asia/Pacific Region Air Traffic Flow Management Steering Group (ATFM/SG), in its final draft of Regional Framework for Collaborative ATFM, to be presented to APANPIRG/26 for adoption, has specified that FIXM 3.0 (or later), extended where necessary for the Asia/Pacific Region, would be the agreed exchange model for ATFM information.
- 2.8 To ensure the maximum benefit to the seminar some general points have to addressed:

Topics

2.9 The meeting is invited to propose topics that should/could be addressed by the Seminar. Topics would include an extensive update by ICAO on the status of the work ongoing with SWIM.

Audience

2.10 The audience should be multidisciplinary: regulatory and operational backgrounds in CNS, ATM, MET, flight operations and airport operations. It is envisaged to hold the seminar in Bangkok at ICAO conference room and, if needed, RSO facilities in Beijing with audio/video facilities in real time to cover the event. Up to 200 participants could be accommodated.

Partnership

2.11 A partnership with sponsors funding the seminar would facilitate the venue of the meeting. States/Organizations are invited to help ICAO source the sponsors.

Experts

2.12 In addition to the experts from partner companies/organizations, SWIM experts would be invited by ICAO HQ and ICAO APAC RO. States/Organizations are invited to help ICAO source the experts.

Demonstrations

2.13 An update on the Mini Global Demonstration on SWIM could be done during the event. Other types of simulations/live trials should be promoted likewise

3. Action by the Meeting

- 3.1 The meeting is invited to:
 - a) note the information contained in this paper;
 - b) discuss the topics, audience, partnerships, expertise and demonstrations possibilities for 2016 Seminar; and
 - c) discuss any relevant matters as appropriate.
