



Agenda Item 7: Planning for SWIM Implementation

Follow-up to the recommendations of the SWIM Workshop

(Presented by the Secretariat)

SUMMARY	
This working paper follows up on the conclusions and recommendations of the Workshop on SWIM conducted in November 2017 in Lima, Peru.	
REFERENCES	
<ul style="list-style-type: none">• Annex 15 to the Convention on International Civil Aviation• Doc 9750 Global Air Navigation Plan, Fifth edition• Doc 9854 ATM Operational Concept• Doc 10039 Manual on SWIM (concept) (Disclaimer)• Conclusions and recommendations of the Workshop on SWIM	
ICAO strategic objectives:	<i>A - Safety</i> <i>B - Air navigation capacity and efficiency</i> <i>E - Environmental protection</i>

1. Background

1.1 Annex 15, Chapter 3, 3.6, introduces the issue of automation, stating that it is used in order to improve timeliness, quality, efficiency, and profitability of aeronautical information services. It further states that, in order to comply with data quality, automation will permit:

- a) the digital exchange of aeronautical data among the parties of the data processing chain; and
- b) use of globally interoperable aeronautical information and data exchange models.

1.2 The fifth edition of Doc 9750, under the ASBU methodology, in performance improvement area 2 (interoperable systems and data), includes in Block 1 the facilities related to system-wide data management (SWIM).

1.3 The SWIM manual (Doc 10039) provides a vision of globally interoperable information management, while providing guidelines on transition to a mixed interoperable system.

2. Discussion

2.1 In 2017, a Seminar/workshop on SWIM was held from 31 October to 3 November, with the participation of all SAM States, the industry, and the SWIM panel from Headquarters.

2.2 At this workshop, various issues related to the concepts, scope, and actors involved in the planning of SWIM were clarified. Searching for a sufficiently clear definition, it was concluded that “*SWIM is an approach focusing on quality, timely, and reliable data to be exchanged between systems under pre-established standards*”, in order to achieve the basic interoperable objectives for the exchange of ATM data, based on XML.

2.3 The presentations and work material presented at the seminar/workshop clarified SWIM concepts and the steps required for its implementation. Likewise, information was obtained on the activities being carried out by the IMP panel. It was also noted that States should assume responsibilities regarding the infrastructure, communication networks, security, and data protection, taking into account the need to involve IT (systems, networks, and cybersecurity) personnel in order to be prepared for SWIM implementation.

2.4 Likewise, stakeholders in SWIM implementation planning have been identified, namely the aeronautical authority, ANSPs, weather services, aircraft and airport operators, the aeronautical industry, as well as software developers and researchers. Note has been taken of the need to involve all areas related to SWIM implementation, based on their relevance, in the development of an effective SWIM implementation plan.

2.5 In order to accomplish the above, the States should take into account the following:

- a) conduct an internal evaluation of facilities and infrastructure currently available for SWIM implementation;
- b) prepare a “roadmap” to follow up those requirements that are not currently available but are needed for SWIM implementation.

2.6 States should provide information on items a) and b) of paragraph 2.5 in order to assess the progress made on SWIM.

3. Suggested action:

3.1 The Meeting is invited to:

- a) review the information contained in this working paper;
- b) provide information concerning paragraph 2.5; and
- c) take any other action it may deem appropriate.