



INTERNATIONAL CIVIL AVIATION ORGANIZATION

Ninth Meeting of the AASPG Airspace and Aerodrome Operations Sub-Group (AAO/SG9)

Nairobi, Kenya 13-17 July 2026

Agenda Item 3: Achievements in AOP and ATM/SAR

UPDATE ON THE AFI FLIGHT AND FLOW – INFORMATION FOR COLLABORATIVE ENVIRONMENT (FF-ICE) PMT

(Presented by FF-ICE PMT)

SUMMARY
This working paper outlines activities relating to the AFI Flight and Flow – Information for Collaborative Environment (FF-ICE) project team.
REFERENCE(S): 1. AASPG Handbook 2. AAO/SG8 Report 3. Doc 9750, Global Air Navigation Plan 4. Doc 4444 – PANS-ATM 5. AASPG/1 Report
Related ICAO Strategic goal(s): (a)- Every Flight is Safe and Secure (c)- Aviation Delivers Seamless, Accessible, and Reliable Mobility for All

1. INTRODUCTION (HISTORY)

- 1.1 The APIRG/26 meeting held in Cotonou, Benin, from 6 to 10 November 2023, through its APIRG/26 Decision 26/17, endorsed the establishment of the FF-ICE Project Team aiming to assist the AFI region to better prepare for the transition to FF-ICE in 2034.
- 1.2 The first meeting of the Africa - Indian Ocean Aviation System Planning and Implementation Group (AASPG/1) held in Libreville, Gabon, from 3 to 7 November 2025, discussed the activities of the FF-ICE PMT since AAO/SG7, which included the development of the ToR of the System Wide Information Management (SWIM), the SWIM Project documentation and ASBU elements related to SWIM. The aforementioned SWIM Project documentation was endorsed by AASPG/1.
- 1.3 Activities conducted between AAO/SG8 and AAO/SG9 include:
 - a) Presentation of SWIM ToR and Project documentation to AASPG for

endorsement.

- b) Support to the CANSO SWIM/FF-ICE Workshop in December 2025.
- c) Initiation of FF-ICE Roadmap activities and concept of Operations.

2. DISCUSSION

2.1 Between 2 – 4 December 2025, the Uganda Civil Aviation Authority (UCAA) and ICAO hosted a major Future Skies of Africa Workshop at the Protea Hotel Entebbe. This event brought together 15 states , including Angola, Burundi, Cape Verde, Cameroon, Congo, Ghana, Kenya, Namibia, Rwanda, Senegal, South Africa, Togo, Tanzania, the United States of America, and Zambia, where participants explored how SWIM and FF-ICE will enhance information sharing, improve interoperability, and support the transition toward trajectory-based operations across the continent.to align regional readiness for SWIM and FF-ICE.

2.2 The FF-ICE PMT has initiated the drafting of Roadmap objectives and Concept of operations. The draft Roadmap proposes a phased approach as listed below:

2.2.1 Phase 1: Preparation and foundation (2025-2028)

Objective 1.0: Establish FF-ICE governance structure and stakeholder coordination

Objective 1.1: Develop the Regional implementation plan including functional requirements

Objective 1.2: Conduct awareness campaigns and build initial human capacity

Objective 1.3: Conduct technical and operational assessment and GAP analysis

Objective 1.4: Define Regional FF-ICE Concept of Operations (CONOPS)

Objective 1.5: Identify and update State regulations and AIP materials related to FF-ICE implementation

2.2.2 Phase 2: FF-ICE initial implementation (2028-2032)

Objective 2.1: Establish coordination framework with SWIM Project Team to prepare exchange environment for FF-ICE operations

Objective 2.2: Upgrade or procure Airspace Users (AU) and ATM technical systems

Objective 2.3: Conduct comprehensive training program for all stakeholders

Objective 2.4: Initiate preoperational implementation and testing of FF-ICE mandatory services with selected states, ANSP and AU

Objective 2.5: develop Tools to monitor FF-ICE operations performance

2.2.3 Phase 3: Transition and full implementation (2032-2034)

Objective 3.1 Deploy FF-ICE service across AFI region including cross border interactions

Objective 3.2 Integrate FF-ICE with other ATM components (ATFM, AIM, MET, etc.)

Objective 3.3 Monitor FF-ICE operations

Objective 3.4 develop and implement global FPL 2012 sunset plan

2.3 As highlighted during AASPG/1, SWIM is a key enabler of FF-ICE and would need to be implemented in alignment with the SWIM Roadmap activities identified in Uganda Entebbe during the SWIM/FF-ICE Workshop between 2 – 4 December 2025.

2.4 The FF-ICE PMT is also still awaiting the publication of the implementation guidance for FF-ICE, Doc 9965 VOL II, which was planned to be published by end of 2024.

2.5 Discussion points under the ICAO Information Management Panel currently include potential fragmentation of regional implementation of SWIM not delivering benefits anticipated and future strategic planning related to AFTN/AMHS in relation to SWIM, similar to FPL2012 sunset and FF-ICE.

2.6 The planned activities leading up to AAO SG/10 are listed in section 2.2.1 above.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) Note the activities of the AFI FF-ICE PMT.
- b) Review and endorse proposed Roadmap Activities as per this working paper.
- c) Request ICAO Secretariate to obtain timelines on the publication of FF-ICE Implementation guidelines Doc 9965 VOL II.
