



International Civil Aviation Organization

MIDANPIRG/21 & RASG-MID/11 Meetings

(Abu Dhabi, UAE, 4 – 8 March 2024)

Agenda Item 5.3: ANS (AIM, PBN, AGA-AOP, ATM-SAR, CNS and MET

FF-ICE IMPLEMENTATION

(Presented by UAE)

SUMMARY

This paper is to inform MIDANPIRG of the FF-ICE developments and proposes a plan to support the FF-ICE implementation within the MID Region. As an essential component in air traffic management by 2032, urging the States to recognize the need for a regional approach to harmonized implementation.

Action by the meeting is at paragraph 3.

Reference

- ICAO Doc 9854: Manual on Flight and Flow-information for a Collaborative Environment (FF-ICE)
- Doc 9882: Manual of Air Traffic Management System Requirements
- Doc 9750: GANP: Global Air Navigation Plan
- Doc 9965: Manual on Flight and Flow – Information for a Collaborative Environment
- ATM SG/9 meeting report

1. INTRODUCTION

1.1 The Global ATM Operational Concept (Doc 9854) includes the FF-ICE (Flight and Flow-Information for a Collaborative Environment) concept to introduce a new mechanism that succeeds and addresses the limitations of the present-day ICAO flight plan (2012), enabling the sharing and optimisation of the flight trajectory when and where required.

1.2 The Flight and Flow - Information for a Collaborative Environment (FF-ICE) concept as published by ICAO in the first edition of the Manual on Flight and Flow Information for a Collaborative Environment (Doc 9965) in 2012 intends to enable the transition to a fully collaborative environment, leading to a Trajectory Based Operations (TBO) environment.

2. DISCUSSION

2.1 The FF-ICE concept provides a globally harmonized process for planning and delivering consistent flight information. The underlying methods for exchanging flight information may differ depending on local design considerations. Still, they must be cross-border compatible and able to exchange the necessary data at every flight planning stage.

2.2 A globally standardized and clear collection of information elements will serve as the foundation for the FF-ICE. Consistent information delivery does not mean that information needs will be the same everywhere. Although the definition of flight information will be standardized worldwide, each region may require specific extension data items. This suggests, practically speaking, that an infrastructure is needed to facilitate the transportation and distribution of this data.

2.3 The migration from FPL2012 to FF-ICE signifies a critical advancement in air traffic management. FF-ICE introduces advanced capabilities, streamlined data exchange, and fosters a collaborative environment, aligning with the dynamic requirements of the aviation industry.

2.4 FF-ICE supports ATM Operational Concept components requiring flight information and refines Doc 9854 in flight information management. It aims to evolve towards a performance-based air navigation system. FF-ICE's guiding principles include flexibility, early intent indication, support for 4D management, and global standardization of machine-readable information.

2.5 Recognizing the importance of this transition, it is proposed to implement FF-ICE regionally by no later than 2032. States are strongly encouraged to initiate preparations promptly to facilitate a smooth and harmonized transition, capitalizing on the myriad benefits of FF-ICE.

2.6 FF-ICE Release 1 allows access to more information and introduces a new planning service which allows submission of flight intent that can be negotiated with ATM Service Providers (ASPs) and resulting in a collaborative planning process. FF-ICE Release 1 contains six services. These are: Filing Service, Flight Data Request Service, Planning Service, Trial Service, FF-ICE Data Publication Service and Notification Service. Each of the services can be implemented independently as required with the first two (Filing Service and Flight Data Request Service) being the basic services required.

2.7 In line with these objectives, FF-ICE workshops are required in the region to aid in identifying the required type and level of expertise as well as the forum for delivering a comprehensive and practical Middle East (MID) Region FF-ICE implementation Plan as per the working paper presented by UAE to the ATM SG ninth meeting, with the recommendation to establish a regional FF-ICE Task Force.

2.8 Based on all the above, the meeting is invited to review and agree on the following Draft Conclusion:

DRAFT CONCLUSION 21/X: MID FF-ICE WORKSHOPS 2024-2025

The FF-ICE Workshops be conducted during 2024 – 2025, with the support of the ATFM TF and the relevant Subgroups to address the FF-ICE planning and implementation in the MID Region.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the content of the paper, and
- b) review and agree on the Draft Conclusion in para 2.8.
